

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ လျှပ်စစ်နှင့်စွမ်းအင်ဝန်ကြီးဌာန

စာအမှတ်၊MOEE-၂/(၁၅)/(Powergen)(၁၂၎၇၅)/၂၀၁၈

ရက်စွဲ ၊ ၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ _{၁၃} ရက်

သို့

မြန်မာနိုင်ငံရင်းနှီးမြှပ်နှံခူကော်ချင်

အကြောင်းအရာ။ ကျောက်ဆည်ဒေသတွင်တည်ဆောက်မည့် ၁၄၅ မဂ္ဂါဝပ် ဓာတ်အားပေးစက်ရံ အတွက် လုပ်ငန်းဆောင်ရွက်မည့် Powergen Kyaukse Company Limited မှ Gas Engine များနှင့် ဆက်စပ်ပစ္စည်းများအချိန်မီတင်သွင်းနိုင်ရန်အတွက် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်မှ ကြိုတင်ခွင့်ပြုမိန့်ထုတ်ပေးနိုင်ပါရန် ထောက်ခံ တင်ပြစြင်းကိစ္စ

ရည်ညွှန်းချက် ။ ဤဝန်ကြီးဌာန၏ ၁၀-၈-၂၀၁၈ ရက်စွဲပါစာအမှတ် MOEE-၂ / (၁၅) / (င) / (NIHC) / (၁၂၃၂၄) / ၂၀၁၈

၁။ မန္တလေးတိုင်းအသကြီး၊ ကျောက်ဆည်အသ၊ ဘဲလင်း ၂၃၀ ကေဗွီ ဓာတ်အားခွဲရုံတွင် Powergen Kyaukse Company Limited မှ ၁၄၅ မဂ္ဂါဝပ် Gas Engine ဓာတ်အားပေးစက်ရုံ တည်ဆောက်ပြီး မြန်မာနိုင်ငံအတွင်းလျှပ်စစ်ဓာတ်အားထုတ်လုပ်ရောင်းချရန်အတွက်လုပ်ထုံးလုပ်နည်းများနှင့် အညီ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သို့လျှောက်ထားမှုအပေါ် လိုအပ်သလိုကူညီဆောင်ရွက်ပေးနိုင်ပါ ရန် ရည်ညွှန်းချက်ပါစာဖြင့် ညှိနှိုင်းမေတ္တာရပ်ခံခဲ့ပါသည်။

၂။ အဆိုပါကုမ္ပဏီနှင့် (၅) နှစ်စာဓာတ်အားဝယ်ယူရေးစာချုပ် (Power Purchase Agreement) ချုပ်ဆိုနိုင်ရေး သက်ဆိုင်ရာဌာနများ၏သဘောထားမှတ်ချက်နှင့်အညီပြင်ဆင်ပြီးဖြစ်သည့် PPA စာချုပ် (မူကြမ်း) အားလက်မှတ်ရေးထိုးခွင့်ပြုပါရန် ပြည်ထောင်စုအစိုးရအဖွဲ့၊ စီးပွားရေးရာကော်မတီသို့ (၉-၈-၂၀၁၈)ရက်တွင် အမှာစာတင်ပြထားပါသည်။

၃။ ဤဝန်ကြီးဌာနမှ Powergen Kyaukse Company Limited သို့ Letter of Acceptance (LOA) ထုတ်ပေးခဲ့သော ၇-၅-၂၀၁၈ ရက်မှစ၍ ကုမ္ပဏီသည် စီမံကိန်းလုပ်ငန်းများစတင်အကောင်ထည် ဖော်ဆောင်ရွက်ခဲ့ရာ လက်ရှိတွင် စီမံကိန်းမြေနေရာအား ရှင်းလင်းပြီးစီးပြီဖြစ်၍ Gas Engine များ တည်ဆောက်နိုင်ရန် Civil Works များဆောင်ရွက်လျက်ရှိပါသည်။ ထို့အပြင် စီမံကိန်းတွင် တပ်ဆင် အသုံးပြုမည့် Gas Engine (၈) လုံးအား Wartsila ကုမ္ပဏီမှ အီတလီနိုင်ငံတွင် တည်ဆောက်ထုတ်လုပ် ခဲ့ပြီးဖြစ်၍ ၃-၈-၂၀၁၈ ရက်နေ့တွင် အီတလီနိုင်ငံ၊ Trieste ဆိပ်ကမ်းမှ သင်္ဘောတင်၍ မြန်မာနိုင်ငံသို့ တင်ပို့ခဲ့ပြီး ၂၀၁၈ ခုနှစ် ဩဂုတ်လကုန်တွင် မြန်မာနိုင်ငံ၊ ရန်ကုန်ဆိပ်ကမ်းသို့ ဆိုက်ရောက်မည် ဖြစ်ပါသည်။ ၄။ သို့ဖြစ်ပါ၍ ကျောက်ဆည်ဒေသတွင်တည်ဆောက်မည့် ၁၄၅ မဂ္ဂါဝပ် ဓာတ်အားပေးစက်ရုံ အတွက် လုပ်ငန်းဆောင်ရွက်မည့် Powergen Kyaukse Company Limited မှ Gas Engine များနှင့် ဆက်စပ်ပစ္စည်းများ အချိန်မီ တင်သွင်းနိုင်ရန်အတွက် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်မှ ကြိုတင် ခွင့်ပြုမိန့် ထုတ်ပေးနိုင်ရေး လိုအပ်သလိုကူညီဆောင်ရွက်ပေးနိုင်ပါရန် ညှိနှိုင်းမေတ္တာရပ်ခံအပ်ပါသည်။

July ပြည်ထောင်စုဝန်ကြီး (ကုမာာ) (ဒေါက်တာထွန်းနိုင်၊ ဒုတိယဝန်ကြီး)



သို့

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ လျှပ်စစ်<mark>နှင့်စွမ်း</mark>အင်ဝန်ကြီးဌာန

စာအမှတ်၊MOEE-၂/ (၁၅)/ (င)/(NIHC)/ (ခါခုမီ)/၂၀၁၈ ရက်စွဲ ၊ ၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ ၁၀ ရက်

မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်

အကြောင်းအရာ။

Powergen Kyankse Company Limited မှ ကျောက်ဆည်ဒေသတွင် အကောင်အထည်ဖော်ဆောင်ရွက်မည့် ၁၄၅ မဂ္ဂါဝပ်ဓာတ်အားပေးစက်ရံ တည်ဆောက်ခြင်းလုပ်ငန်းအတွက် ခြန်ဓာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သို့ ခွင့်ပြုမိန့် လျှောက်ထားခြင်းအားထောက်ခံတင်ဝြခြင်းကိစ္စ

၁။ မန္တလေးတိုင်းဒေသကြီး၊ ကျောက်ဆည်ဒေသ၊ ဘဲလင်းရှိ ၂၃၀ ကေဗွီ ဓာတ်အားခွဲရုံတွင် ၁၄၅ မဂ္ဂါဝပ် Gas Engine ဓာတ်အားပေးစက်ရုံမှ ဓာတ်အားထုတ်လုပ်နိုင်ရေး Powergen Kyaukse Company Limited မှ အကောင်ထည်ဖော်ဆောင်ရွက်လျက်ရှိပါသည်။ အဆိုပါကုမ္ပဏီနှင့် (၅)နှစ်စာ ဓာတ်အားဝယ်ယူရေးစာချုပ် (Power Purchase Agreement) ချုပ်ဆိုနိုင်ရေး သက်ဆိုင်ရာ ဌာနကြီးများ၏ သဘောထားမှတ်ချက်နှင့်အညီ ပြင်ဆင်ပြီးဖြစ်သည့် PPA စာချုပ်(မူကြမ်း) အား လက်မှတ်ရေးထိုးခွင့်ပြုပါရန် ပြည်ထောင်စုအစိုးရအဖွဲ့၊ စီးပွားရေးရာကော်မတီသို့ ၉-၈-၂၀၁၈ ရက် တွင် အမှာစာတင်ပြထားပါသည်။ ထို့အပြင် မြန်မာနိုင်ငံ၏ လျှပ်စစ်ဓာတ်အားလိုအပ်ချက်အပေါ်

မူတည်၍ ဓာတ်အားဝယ်ယူရေးစာချုပ်အား သက်တမ်းတိုးမြှင့်ချုပ်ဆိုသွားမည်ဖြစ်ပါသည်။ ၂။ ထိုသို့ဆောင်ရွက်နေစဉ်ကာလအတွင်း သက်ဆိုင်ရာကုမ္ပဏီမှ စီမံကိန်းလုပ်ငန်းများ စတင် အကောင်အထည်ဖော်နိုင်ရန်အတွက် Letter of Acceptance (LoA) အား ၇-၅-၂၀၁၈ ရက်တွင် ဤဝန်ကြီးဌာနမှ ထုတ်ပေးထားပြီးဖြစ်ပါသည်။

၃။ သို့ဖြစ်ဝါ၍ Powergen Kyaukse Company Limited မှ ဓာတ်အားပေးစက်ရုံတည် ဆောက်ပြီး မြန်မာနိုင်ငံအတွင်း လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ရောင်းချရန်အတွက် လုပ်ထုံးလုပ်နည်း များနှင့်အညီ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သို့ လျှောက်ထားမှုအပေါ် လိုအဲပ်သလိုကူညီ ဆောင်ရွက်ပေးနိုင်ပါရန် ညှိနှိုင်းမေတ္တာရပ်ခံအပ်ပါသည်။

ပူးတွဲလျက်။ Powergen Kyaukse Company Limited မှ အဆိုပြုတင်ပြချက် (၁) အုပ်

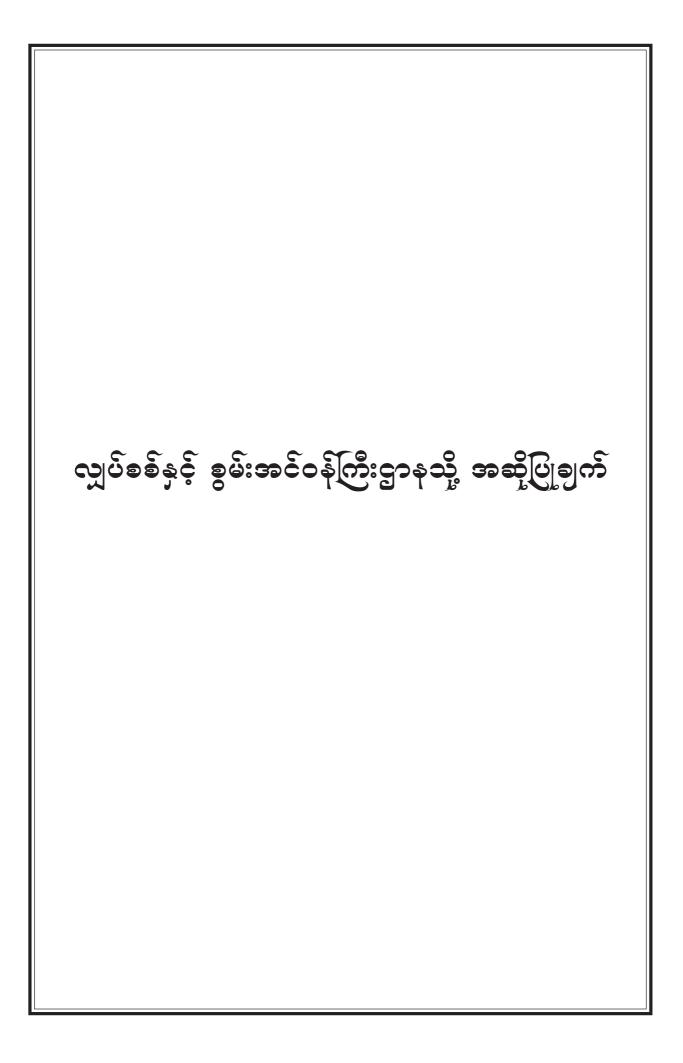
ပြည်ထောင်စုဝန်ကြီး(🖚 🔊) (တင်မောင်ဦး၊ အမြံတမ်းအ<mark>တွင်းဝ</mark>န်) Policy61GMOEE2018/Form 201304OEP-LH(Stinidard)

Policy/SIGMOEE20 (8%Form 2018/MOEP-LH(SLondard)

မိတ္တူကို

လျှပ်စစ်စွမ်းအားစီမံရေးဦးစီးဌာန လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ရေးလုပ်ငန်း ရုံးလက်ခံ/ မျှောစာတွဲ

	မာတိကာ	
၁။	လျှပ်စစ်နှင့်စွမ်းအင်ဝန်ကြီးဌာနသို့ အဆိုပြုချက်	(c)
J۳	တင်ဒါ/စီမံကိန်းဆိုင်ရာ အချက်အလက်များ	(J)
9 1	ဓါတ်အားဝယ်ယူရေး သဘောတူညီချက်စာချုပ် (မူကြမ်း)	(၃)
<u>۶</u> ။	မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သို့	(9)
	(က) ရင်းနှီးမြှုပ်နှံသူ၏ အဆိုပြုချက် - ပုံစံ (၂)	
	(ခ) အခွန်ကင်းလွတ်ခွင့် (သို့) သက်သာခွင့် လျှောက်ထားချက်-	ပုံစံ (၆)
	(ဂ) နောက်ဆက်တွဲ စာရင်းဇယားများ	
	(၁) ရင်းနှီးမြှုပ်နှံမှုပမာဏနှင့် စက်ပစ္စည်းကရိယာစာရင်း	
	(၂) ငွေကြေးဆိုင်ရာတွက်ချက်မှု စာရင်းဇယားများ	
၅။	ဝန်ထမ်းအင်အားစာရင်း	(ე)
၆။	ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးအစီအစဉ်	(6)
Sıı	မီးဘေးကြိုတင်ကာကွယ်ရေးအစီအစဉ်	(₂)
ຄແ	လူမှုဖူလုံရေး၊ သက်သာချောင်ချိမှု ဆောင်ရွက်မည့်အစီအမံများ	(၈)
၉။	ဝန်ခံကတိပြုချက်များ	(၉)
၁၀။	ကုမ္ပဏီဆိုင်ရာအထောက်အထားများ	(၁၀)
	(က) ဘဏ်အထောက်အထားများ	
	(ခ) ကုမ္ပဏီမှတ်ပုံတင်/ သင်းဖွဲ့မှတ်တမ်းနှင့် သင်းဖွဲ့စည်းမျဉ်းမျ):



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> စာအမှတ်။ ။ NIHC/KS-135/MIC-*23*/2018 ရက်စွဲ။ ။ ၂၀၁၈ခုနှစ်၊ ဩဂုတ်လ (နြ) ရက်

သို့

ဦးဆောင်ညွှန်ကြားရေးမှူး လျှပ်စစ်ဓါတ်အားထုတ်လုပ်ရေးလုပ်ငန်း လျှပ်စစ်နှင့် စွမ်းအင်ဝန်ကြီးဌာန နေပြည်တော်

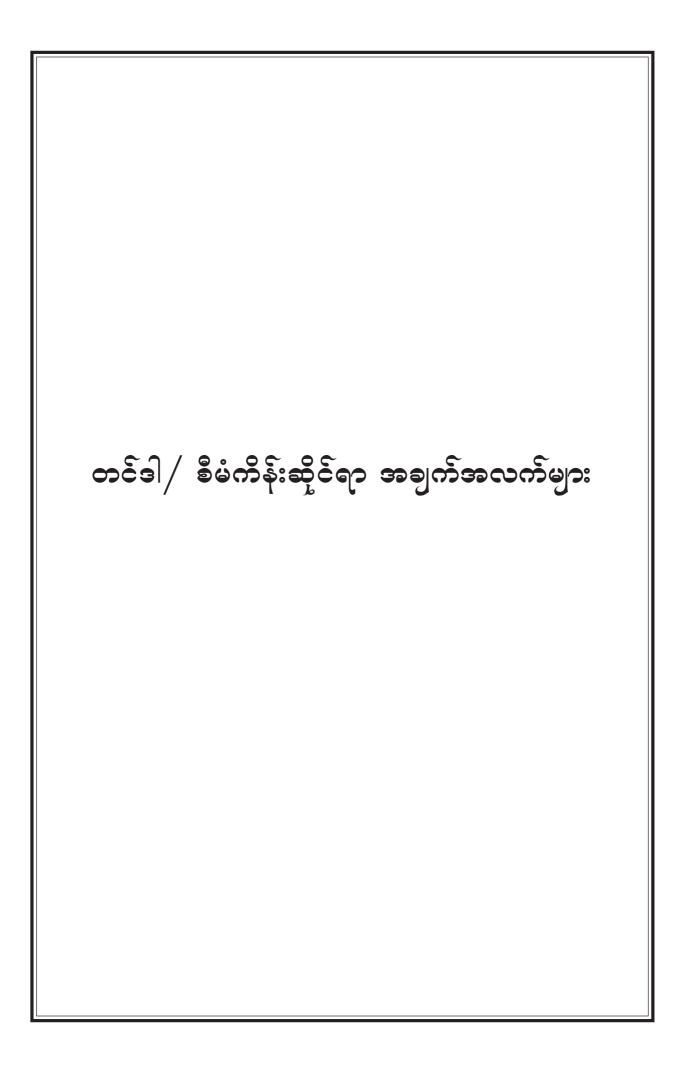
- အကြောင်းအရာ။ မန္တလေးတိုင်း၊ ကျောက်ဆည်ခရိုင်၊ စဉ့်ကိုင်မြို့နယ် (230 kV) ဘဲလင်းဓါတ်အားခွဲရုံဝန်းအတွင်း တည်ဆောက်မည့် (145.49MW) ဓါတ်အားပေးစက်ရုံ စီမံကိန်းလုပ်ငန်းအတွက် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှု ဥပဒေနှင့်အညီ ခွင့်ပြုမိန့်နှင့် သက်သာခွင့်တို့အတွက် အဆိုပြုတင်ပြချက်။
- ရည်ညွှန်းချက်။ လျှပ်စစ်နှင့်စွမ်းအင်ဝန်ကြီးဌာန၏ (၇-၅-၂၀၁၈) ရက်စွဲပါ Letter of Acceptance
- ၁။ ကျွန်တော်များ The NIHC Consortium သည် မန္တလေးတိုင်း၊ ကျောက်ဆည်ခရိုင်၊ စဉ့်ကိုင်မြို့နယ် (230 kV) ဘဲလင်းဓါတ်အားခွဲရုံဝန်းအတွင်း (145.49 MW) ဓါတ်အားပေး စက်ရုံ တည်ဆောက်ပြီး ဓါတ်အားထုတ်လုပ်ရေးစီမံကိန်း အတွက် တင်ဒါ အောင်မြင်ခဲ့ပြီး စီမံကိန်းလုပ်ငန်းများ စတင်ဆောင်ရွက်နိုင်ရန် ရည်ညွှန်းပါ Letter of Acceptance ကို (၇-၅-၂၀၁၈) ရက်နေ့တွင် လက်မှတ်ရေးထိုးခဲ့ပြီး ဖြစ်ပါသည်။
- ၂။ အဆိုပါစီမံကိန်းများ အကောင်အထည်ဖော်ဆောင်ရွက်ရန် The NIHC Consortium အနေဖြင့် စီမံကိန်းအကောင်အထည်ဖော်မည့် ဖက်စပ်ကုမ္ပဏီအဖြစ် PowerGen Kyaukse Co.,Ltd ကို (၂၇-၆-၂၀၁၈)တွင် ကုမ္ပဏီမှတ်ပုံတင်အမှတ် (၃၁၄အက်ဖ်စီ/၂၀၁၈-၂၀၁၉ (ရက)) ဖြင့် ဖွဲ့စည်းတည်ထောင်ထားပြီး ဖြစ်ပါသည်။
- ၃။ စီမံကိန်းအတွက် ဓါတ်အားဝယ်ယူရေးစာချုပ် (မူကြမ်း) Power Purchase Agreement Draft (PPA Draft) ကို နှစ်ဦးနှစ်ဖက်အကြိမ်ကြိမ် ဆွေးနွေးညှိနှိုင်း အတည်ပြုထားသည့် စာချုပ် (မူကြမ်း)ကို သက်ဆိုင်ရာဝန်ကြီးဌာနများသို့ သဘောထားမှတ်ချက်များ တောင်းခံထားပြီး ဖြစ်ပါသည်။

- ၄။ ဓါတ်အားပေးစက်ရုံစီမံကိန်းအား ၂၀၁၉ခုနှစ် ဖေဖော်ဝါရီလအမီ စီးပွားဖြစ်စတင် ဓါတ်အား ထုတ်လုပ်နိုင်ရေးအတွက်ဘက်ပေါင်းစုံမှ အားသွန်ခွန်စိုက် ကြိုတင်စီစဉ် ဆောင်ရွက်မှု လုပ်ငန်းများ ဆောင်ရွက်နေပြီဖြစ်ပါသည်။
- ၅။ ယခုစီမံကိန်း၏လျှပ်စစ်ဓါတ်အားပေးစက်များမှာ စက်အင်အားပမာဏကြီးမားပြီး ရင်းနှီး မြှုပ်နှံမှုများလည်း များပြားသည့်အတွက် ဌာနနှင့်ချုပ်ဆိုမည့် ဓါတ်အားဝယ်ယူရေးစာချုပ် (၅)နှစ်ကာလသက်တမ်းပြီးဆုံးပြီးနောက် ဌာနမှ ဆက်လက်ဓါတ်အားဝယ်ယူရန် ဆန္ဒရှိပါက လည်း အဆိုပါစက်ရုံမှ ဓါတ်အားထုတ်လုပ်ပေးသွားဖြစ်ကြောင်း (သို့မဟုတ်) ပြည်နယ် တိုင်းဒေသကြီးရှိ စက်မှုဇုံ/အထူးစီးပွားရေးစက်မှုဇုံတို့တွင် လျှပ်စစ်လိုအပ်ချက်များ တစ်ဖက်တစ်လမ်းမှ ဖြည့်ဆည်းနိုင်ရေးအတွက် ဆက်လက်ရင်းနှီးမြှုပ်နှံ ဆောင်ရွက်သွားမည် ဖြစ်ပါသည်။
- ၆။ သို့ဖြစ်ပါ၍ စီမံကိန်းပမာဏကြီးမားခြင်းနှင့် လိုအပ်သည့်ပစ္စည်းများ ပြည်ပမှ သာဝယ်ယူ တင်သွင်းရမည်ဖြစ်ပြီး၊ နိုင်ငံတော်၏လိုအပ်ချက်ဖြစ်သည့် လျှပ်စစ်ဓါတ်အား ထုတ်လုပ်ပေး သည့် စီမံကိန်းလုပ်ငန်းဖြစ်ပါသဖြင့် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေနှင့်အညီ ခွင့်ပြုမိန့် ရရှိရေး၊ အခွန်ဆိုင်ရာ သက်သာခွင့်များရရှိရေးအတွက်နှင့် ဓါတ်အားဝယ်ယူရေးစာချုပ်ကို လက်မှတ်ရေးထိုး ချုပ်ဆိုပြီး စီမံကိန်းလုပ်ငန်းဆောင်ရွက်သွားနိုင်ရေးအတွက် အဆိုပြုချက်ကို မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှုကော်မရှင်သို့ ဆက်လက်တင်ပြပေးနိုင်ပါရန်နှင့် လိုအပ်သည်များ လမ်းညွှန်မှု ပေးနိုင်ပါရန် တင်ပြအပ်ပါသည်။

လေးစားစွာဖြင့် \ MAUNG KYAY MANAGING DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD.

The NIHC Consortium (ကိုယ်စား)

မိတ္သူကို-(၁) အင်ဂျင်နီယာချုပ်၊ အပူစွမ်းအင်သုံးစက်ရုံများဌာန၊ လျှပ်စစ်ဓါတ်အားထုတ်လုပ်ရေးလုပ်ငန်း။ (၂) ရုံးလက်ခံ





Part V Technical Data and Submittal

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S.No.	Description		Bidder's Scope
1			147.768MW
T	Installed Capacity MW-(No. of Unit x MW/Unit)		(8 units x18.471MW/Unit)
2	Guarantee Generating Output MW-(No. of Unit x		145.490 MW
2	MW/Unit) at site Condition		(8 Units x18.18625MW/Unit)
3	Generator Output Voltage (V)	_	11kV
	Net Efficiency (%)(Plant overall)	50% Load	41.34%based on HHV
		100%Load	41.34%based on HHV
	Net Guarantee Heat Rate (Btu/kWh)	50% Load	8,253.80 Btu/kWh
	(Plant overall) (at any site condition	100% Load	
	based on Higher Heating value)	100% L080	8,253.80 Btu/kWh
	Fuel cost (US cents/kWh) = Net		
	Guarantee Heat Rate (8tu/kWh) * gas	50% Load	8.03 US cents/kWh
4	price (USD/MMBtu) /10,000		
ļ,	Fuel cost (US cents/kWh) = Net		
	Guarantee Heat Rate (Btu/kWh) * gas	100% Load	8.03 US cents/kWh
1	price (USD/MMBtu) /10,000	500/11	14.25.04.4055
	Fuel Consumption based on High	50% Load	14.3MMCFD
}	Heating Value	100% Load 50% Load	28.5 MMCFD
	kWh/mmBtu @High Heating Value		121.2 kWh/mm8tu
5	(Plant overall) at any site condition 100% Load		121.2 kWh/mmBtu 8
6	Number of Total Running Unit		8
0	Number of Reserved Unit/Machine Model		W18V50SG engines
			manufactured by Wärtsilä
7	Maker & Country of origin		Finland Oy in factory located in
			Trieste, Italy, European Union
[Land requirement for power plant and new		
8	switchbay		24,000 m ²
-			Please refer the attached
9	Site LayoutPlan		General Layout F0419T-Z-01
10	Construction Period (After issuing the L	etter of	
10	Acceptance)		286 days after LOA
11	COD (After issuing the Letter of Accepta	ince)	286 days after LOA
12	Proposal for required new switchbay ar	nd transmission	Please refer the attached Single
12	line facility		Line Diagram F0419T-D01-01
	Proposal for required new gas supply infrastructure		Please refer the attached Gas
13			Supply Infrastructure Drawings
			and Map
14	Required gas pressure of power plant	Paguired gas pressure of power plant	
**	Redaried Bas biessure of hower hight		regulating unit inlet
1			2 ×[70MVA,
	Transformer Voltage ratio, Capacity, Vector group, Maker and country of origin (for low voltage side)		145±2X2.5%/11Kv,Ynd11]
			1×[50MVA, 45±2X2.5%/11kV
15			Ynd11]
			Please see attached information sheet for Maker and Country of
			Origin.

Technical Proposal for Rental Service



S.No.	Description	Bidder's Scope
16	Transformer Voltage ratio, Capacity, Vector group, Maker and country of origin (for high voltage side)	2×[70MVA, 145±2X2.5%/11Kv,Ynd11] 1×[50MVA, 145±2X2.5%/11kV, Ynd11] Please see attached information sheet for Maker and Country of Origin.
17	Maker and country of origin for switchgear (for low voltage side)	Please see attached information sheet for Maker and Country of Origin.
18	Maker and country of origin for switchgear (for high voltage side)	Please see attached information sheet for Maker and Country of Origin.
19	Island mode	The Power Plant is capable of operating as an Inland mode.

Gas price shall be assumed as 9.7346 (USD/MMBtu) to calculate the fuel cost (USD/kWh).

The above data shall be based on the following conditions:

1. EPGE SYSTEM VOLTAGE

230 kV ±10 %. OR 132kV ±10 %. 0.8 (LAGGING) UP TO (0.9 LEADING)

- 2. POWER FACTOR
- 3. FREQUENCY

Signature:

4. FREQUENCY VARIATION SETTING

50 HZ (51.5 - 52 Hz, 15 minutes) (51-51.5 Hz, 90 minutes) (48.5 - 51 Hz, continuous) (47.5 - 48.5 Hz, 25 minutes) (47 - 47.5 Hz, 30 minutes)

Authorized Person:Maung Kyay Managing Director, National Infrastructure Holdings Company Limited Anchor Member, NIHC Consortium

1 Compliance with Technical Particulars

The consortium confirms construction and operating of power plant shall comply with the laws, rules and guidelines stipulated by the Ministry of Resources and Environmental Conservation for environment.

The technical specifications of our proposed power plant are attached to this Part V – Technical Data and Submittals, with key highlights provided in the next sections.

In accordance with the SRFP, we hereby submit our qualifications in compliance with the requirements specified in clause 2 (b) Technical Particulars of the Invitation for Bid, to perform the project successfully as set out below:

S.No.	Requirement	Our Consideration	Compliance
1.	Description of the manufacturer /	Description of the manufacturer /	1
	Country of origin for major	Country of origin for major	
	equipment and accessories (with	equipment and accessories (with	
	good and efficient condition);	good and efficient condition) is	
		provided in this Part V – Technical	
		Data and Submittals.	
2.	To state full technical specifications	Full technical specifications of major	1
	of major equipment and efficiency.	equipment and efficiency are	
	The Net Guarantee Heat Rate based	provided in this Part V ~ Technical	
	on Higher Heating value @ any site	Data and Submittals, as summarized	
	Condition, 100% Load Condition,	in Sec. 0 Technical Data.	
	50% Load Condition of the power		
	plant shall be clearly mentioned and		
	EPGE will calculate the fuel cost		
	(UScents/kWh) based on that Net		
	Guarantee Heat rate by using the		
	following formula "Fuel cost		
	(UScents/kWh) ≈ Net Guarantee		
	Heat Rate (Btu/kWh) * gas price	~	
	(USD/MMBtu)/10,000" (ANNEX C,		
	EXHIBIT 5 of SRFP);		
3.	To state the capacity and quantity	Capacity and quantity of the	1
	of the machine to be installed;	machine to be installed are 18.471	
		MW/set x 8 sets.	
ļ		Details are provided in this Part V -	
		Technical Data and Submittals, as	
		summarized in Sec. 0 Technical	
		Data.	

S.No.	Requirement	Our Consideration	Compliance
4.	Designs and construction works for	Designs and construction works for	~
	power plant shall be complied with	power plant comply with	
	international code and standard.	international code and standard.	
		Please also refer to Sec. 3 Codes and	
		Standards of this Part V – Technical	
		Data and Submittals.	
5.	To submit the proposed layout plan	Proposed layout plan for the power	√ ·
	for the power plant according to the	plant is in accordance to the	
	international standards.	international standards.	
		Please refer the attached General	
		Layout F0419T-Z-01 attached to this	
		Part V – Technical Data and	
		Submittals, as well as the technical	
		specifications attached to this Part	
		V.	
6.	The power plant shall be connected	The Consortium confirms that the	
v .	to 132 kV bus at the Bellin	power plant shall be connected to	
	Substation by installing a new 132	132 kV bus at the Bellin Substation	
	kV switchbay and the required	by installing a new 132 kV	
	protection equipment. All cost	switchbay and the required	
	related to connection of 132 kV bus		
		protection equipment. All cost related to connection of 132 kV bus	
	shall be borne by the successful bidder.		
	blader.	shall be borne by the successful bidder.	
		Please also refer to Sec. 7 132kV	
		Transmission of this Part V –	
		Technical Data and Submittals.	
7.	The unit generation shall be read by	The Consortium confirms that the	V
	the energy meter (primary and back	unit generation shall be read by the	
	up) installed at the 132 kV outgoing	energy meter (primary and back up)	
	feeder of the power plant. The cost	installed at the 132 kV outgoing	
ļ	for installation of energy meters	feeder of the power plant. The cost	
	shall be borne by the successful	for installation of energy meters	
	bidder.	shall be borne by the successful	
		bidder.	
8,	The specification of energy meter	The Consortium confirms that the	1
	shall be complied with the standard	specification of energy meter shall	
	of EPGE and energy meter shall be	be complied with the standard of	
	calibrated in test lab of MOEE. The	EPGE and energy meter shall be	
	accuracy class of energy shall be	calibrated in test lab of MOEE. The	
	±0.2%.	accuracy class of energy shall be	
		±0.2%.	

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S.No.	Requirement	Our Consideration	Compliance
9.	Protection relays (for machine and	The Consortium confirms that	4
	substation) shall comprehensively	protection relays (for machine and	
	be included and the specification	substation) shall comprehensively	
	shall be complied with the standard	be included and the specification	
	of EPGE (To state in details of the	shall be complied with the standard	
	specifications)	of EPGE.	
10.	Black Start Facility shall be included	The Consortium confirms that Black	\checkmark
	for re-starting after system black	Start Facility shall be included for	
	out.	re-starting after system black out.	
11.	The successful bidder shall arrange	The Consortium confirms that,	~
	all required gas supply	should it be selected as the	
	infrastructure for the power plant	successful bidder, it shall arrange all	
	at its own cost.	required gas supply infrastructure	
	This Clause 2 (b) (11) as amended in	for the power plant at its own cost.	
	Addendum No. 1.	This Clause 2 (b) (11) as amended in	
		Addendum No. 1.	
12.	The gas consumption of the power	The Consortium confirms	1
	plant shall be read by the gas meter	compliance with this clause.	
	installed at the new gas supply		
	infrastructure.		
	Actual Heat Rate of Power Plant		
	shall be calculated by using energy		
	meter reading of energy meter		
1	located on the outgoing 132 kV		
	feeder of power plant and gas		
	meter reading of the gas meter		
í	located at the new gas supply	ł	
	Infrastructure on monthly basis. The		
	formula to calculate actual Heat		
1	Rate of Power Plant shall be the		
	following; " Actual Heat Rate for a		
	month (Btu/kWh) = Actual gas		
	consumption recorded by the gas		
(meter at the new gas supply	Í	
ę	infrastructure for a month (Btu) /		
	Actual Electricity sent out recorded		
	by the energy meter located at the		
	outgoing 132 kV feeder of power		
	plant for a month (kWh)"		

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S.No.	Requirement	Our Consideration	Compliance
13.	The successful bidder shall be penalized 150% of the cost of the additional gas consumed based on the rate paid by EPGE to the Myanmar Oil and Gas Enterprise if the actual Heat Rate exceeds the guarantee heat rate.	The Consortium confirms that, should it be selected as successful bidder, it shall be penalized as provided in this clause.	
14.	If the Actual Heat Rate of the power plant exceeds more than 5% of the Guarantee Heat Rate of the power plant for more than 3 aggregate months during the contract term, EPGE has the right to terminate the contract which will be entered between EPGE and successful bidder for purchasing of electricity on Rental basis in Kyaukse Region.	The Consortium confirms that if the Actual Heat Rate of the power plant exceeds more than 5% of the Guarantee Heat Rate of the power plant for more than 3 aggregate months during the contract term, EPGE has the right to terminate the contract which will be entered between EPGE and successful bidder for purchasing of electricity on Rental basis in Kyaukse Region.	
15.	COD of the power plant shall achieved after (4) hours continuous operation of the Net Guarantee output and the actual heat rate during this 4 hours continuous operation shall be less than or equal to the Net Guarantee Heat Rate. To determine the Actual Output and Actual Heat Rate of COD test of the power plant, energy meter reading of energy meter located on the outgoing 132 kV feeder of power plant and gas meter reading of gas meter located at the new gas supply infrastructure shall be used.	The Consortium confirms that COD of the power plant shall achieved after (4) hours continuous operation of the Net Guarantee output and the actual heat rate during this 4 hours continuous operation shall be less than or equal to the Net Guarantee Heat Rate. To determine the Actual Output and Actual Heat Rate of COD test of the power plant, energy meter reading of energy meter located on the outgoing 132 kV feeder of power plant and gas meter reading of gas meter located at the new gas supply infrastructure shall be used.	

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2. Allowed Operating Ranges

On our analysis of Myanmar climatic conditions, we found out that the minimum temperatures can become as low as 18 °C in the months of December and January, and are generally below 25 °C throughout the year except in the month of May.

We considered this requirement and designed the machines to function at temperatures of as low as 15 °C. Our engines can operate in a temperature range of 15 °C to 40 °C and in a relative humidity of 100% at 15 °C.

The allowed operating ranges for the finalized Power Plant are:

Design ambient conditions			
Altitude above sea level	100 m		
Ambient air temperature	35 °C		
Relative humidity	60%		
Maximum ambient conditions			
Maximum ambient air temperature	40 °C		
Minimum ambient conditions			
Minimum ambient air temperature	15 °C		
Relative humidity at minimum ambient temperature	100%		

3. Codes and Standards

The consortium confirms construction and operating of power plant shall comply with the laws, rules and guidelines stipulated by the Ministry of Resources and Environmental Conservation for environment.

Details of relevant codes and standards, e.g.: The mechanical systems are designed, manufactured, constructed and installed according to the appropriate extent of the following standards:

International codes and standards

- ASME American Society of Mechanical Engineering
- ASTM American Society for Testing and Materials
- HEJ Heat Exchanger Institute
- NFPA National Fair Protection Association
- IEC- International Electro technical Commission
- ISO- International Organization for Standardization
- API American Petroleum Institute
- NFPA-National Fire Protection Association
- ASHARE American Society of Heating Refrigeration and Air-Conditioning Engineers

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Description	Code	
Engine test run	ISO 15550	
Vibration	ISO 8528 part 9	
Design	EN 12100	
Pipe design calculations	EN 13480 and DIN 2413	
Welding	EN 1011	
Stairs and platforms	ISO	
Dimensional standards for installation materials	DIN, ISO, SFS and EN	
(pipes, beams, etc.)		
Vertical tanks	API 650 or EN 14015	
Horizontal tanks	EN 12285, excluding nozzle location	
Pressure equipment	PED 97/23/EC	
Typical material standard	DIN, SFS and EN	
Abbreviation	· · · · · · · · · · · · · · · · · · ·	

DIN: German Standard (Deutsche Institute für Normung) EN: European Standard ISO: The International Organization for Standard isation SFS: Finnish Standards Association API: American Petroleum Institute

The electrical systems are designed, manufactured, constructed and installed to applicable parts according to the following standards:

Code
IEC 60034
IEC 60076
IEC 60076
IEC 62271-200 or IEC 62271
IEC 61439-2
IEC 60529
IEC 60950
Applicable parts of VDE 3699
IEEE 80
IEC 60439-1
IEC 61131-3
IEC 60598
EN 54
IEC 62305

Abbreviation

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IEC: International Electrotechnical Commission IEEE: Institute of Electrical and Electronics Engineers

EN: European Standard

VDE: The Association for Electrical, Electronic & Information Technologies WOIS Wärtsilä Operator's Interface System]

I&C design codes and standards

The codes and standards for I&C systems will be as following:

International codes and standards

- ISO International Standardization Organization
- IEC International Electro-technical Commission
- IEEE Institute of Electrical and Electronics Engineers
 If they are equal to or above the above-mentioned international standards, the following Chinese
 standards will be adopted.

Chinese codes and standards

- DL/T 5182-2004 Technical rule for designing of local equipment installation, pipeline and cables of I&C in power plant
- GB 50217-2007 Code for design of cables of electric work
- DL/T 5175-2003 Technical rule for designing thermodynamic control system of fossil fuel power plants
- DL/T 5227-2005 -Technical rule for thermal power automation design for auxiliary system (shop) of fossil power plant
- DL /T 641-2005 Electric valve actuator, etc.

Codes and Standards - Civil

The engineering of all the civil works will be based on American codes and standards.

Reinforcing steel: ASTM A615, ASTM A706, etc. as per ACI-318

Cement: Portland cements as per ASTM C150, etc.

Structural steel: ASTM A36/A36M, ASTM A572/572 M (for hot rolled section, plates and bars), ASTM A500 (for tube), ASTM A53/53M Grade-B (for pipes) and ASTM A606 (for sheets) etc.

Connection bolts: ASTM A 307, ASTM A 325, ASTM A 490; nuts- ASTM A 194/194 M ASTM A 563; Washer-ASTM F 436/436M.

Anchor bolts are of ASTM A36/A36M, ASTM A449, ASTM A572/572 M, and ASTM F1554 M (for anchor rod).

4. Generating Set



The W18V50 SG engine and generator are mounted on base frames. The base frames are flexibly mounted on a concrete foundation by means of steel springs.

The main dimensions of the W18V50SG generating set are:

Length	18.781 m
Width	4.09 m
Height	6.02 m
Weight (dry)	364870 kg
Weight (wet)	379870 kg

The main technical data are:

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Configurations	V
Cylinder	18
Cylinder bore	500 mm
Piston stroke	580 mm
Speed	500 rpm (50 Hz)
Mean effective pressure	22kPa
Mean piston speed	9.67 m/s (50 Hz)
Compression ratio	11.5:1
Number of inlet valves	2
Number of outlet valves	2
Direction of rotation facing towards flywheel	Clockwise

Manufacturer : Wärtsila Country of origin: Finland, Italy, Europeam Union

5. Control System

CONTROL SYSTEM

Control and Supervision Concept for Wärtsilä Energy Solutions

The Wärtsilä automation system is designed for safe, reliable, efficient and easy operation of the generating sets, their associated auxiliaries and electrical systems. The modular design of the control system allows the system to be used for optimal power generation for installations ranging from large multi-generating set power plants to one-generating-set installations.

The automation system enables centralised operation of the plant from the control room.

The WOIS (Wärtsilä Operator's Interface System) is an object-oriented, easy-to-use process display and fault-diagnostic workstation located in the control room. As a backup, the plant can also be operated from the control panels located in the same control room.

Wärtsilä may collect information and data relating to the technical operating parameters of any equipment delivered, including without limitation information that Wärtsilä may gather from sensors, instruments, monitors, or other industrial control or SCADA devices on the equipment delivered ("equipment data"), and Wärtsilä may use this equipment data for product and solution development or other purposes.

Control mode options in automatic operation

The following control modes are available for generating set control:

By increasing or decreasing the engine fuel supply, the active power can be controlled in:

- MW mode generating set power is maintained at a pre-set value irrespective of the system load or the frequency. This is the typical operating mode for a base-load power plant supplying an infinite grid.
- Isochronous load sharing the generating set shares the load with other generating sets at a constant frequency. This is the typical operating mode when running in isolation from the grid.
- Speed droop mode the generating set shares the load with the grid, or with the other generating sets according to a speed droop curve. This is the typical operating mode for smaller grids, or island operation.

By increasing or decreasing the generator voltage, the reactive power can be controlled in:

 Constant Power Factor control – the generating set's power factor is maintained at a pre-set value, and any changes are produced by the grid or the other generating sets. This is the typical operating mode for a base-load power plant supplying an infinite grid.

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Voltage droop compensation control - The generating set will share the reactive load with the
other generating sets (if present) based on digital communication lines between the AVRs
when running in island mode. This is the typical operating mode when running in isolation
from the grid. Voltage droop mode – the generating set will share the reactive load with the
grid and other generating sets equally in relation to the size of the units. This is the typical
operating mode for smaller grids or island operation.

The system will automatically switch the operating mode based on the "parallel with grid" signal. In Auto mode, the setting values for active and reactive power will be according to operator input in the WOIS workstation, while in Manual mode they are determined by the switches in the control panel.

Operator station

WOIS workstation

The power plant is controlled and supervised from the WOIS workstation (Wärtsilä Operator's Interface System). All actions necessary for normal operation, such as start and stop of the generating sets, load increase and load reduction are activated and supervised via the WOIS workstation, using a mouse, keyboard and display. The operator can also observe key data from the plant such as various temperatures and pressures as well as measurements of electrical variables such as generator power, voltage and frequency. The WOIS workstation also includes a hard-copy laser printer.

Each WOIS workstation includes the following functionality:

- Using various dynamic objects, such as images of pumps, valves and other components and units. The statuses of these objects are displayed graphically. By interacting with an object, the function and operational status can be displayed.
- Process trends can be displayed as a free combination of six measured values such as
 pressures, temperatures, speed, generating set load, etc. The operator may combine the
 values of interest in one graph to get a good view of the total process for further analysis. The
 trends are stored for up to 180 days, and the operator may call back a trend for any time
 interval within these limits.
- An alarm banner in the uppermost part of the displays information about the most recent alarm. The active alarm list informs the operator of possible problems in the process. An alarm will remain on the active alarm list until the process has returned to normal state and the alarm has been acknowledged. Historical alarm and event lists can be called up for further evaluation of events.
- Any of the displays and the alarm list can be printed to the hard-copy printer.

The WOIS workstation includes the following equipment:



Desktop PC computer with sufficient processing and memory capacity Display, 24" TFT flat screen Keyboard and optical mouse Operating system Human-Machine-Interface (HMI) software

WISE workstation

The WISE workstation (Wärtsilä Information System Environment) handles the long term data storage and reporting functions of the power plant. The operator can view and print out the daily, monthly and yearly reports produced by the reporting program. The WISE workstation keeps engine and production reports available for later study and archiving. The WOIS workstation (Wärtsilä Operator's Interface System) provides information to the WISE workstation.

The WISE workstation includes the following functionality:

- Daily engine and plant reports of plant analogue measurement values.
 Daily minimum, maximum and average values are generated and stored for one year.
- Long-term engine and plant performance tracking through trend displays of the reported analogue measurements.
- Daily production reports of generated active and reactive energy as well as hourly fuel consumption are generated and stored for one year.
- Monthly production reports (on a daily level) are stored for 5 years and yearly production reports are generated and stored for 10 years.
- The production reports include minimum, maximum, average and total sum calculations for the period.
- Electronic log book with search possibilities for recording operation and maintenance activities.

The WISE workstation includes the following equipment:

Desktop PC computer with sufficient processing and memory capacity Display, 24" TFT flat screen Keyboard and optical mouse Operating system software Reporting interface software Laser printer for hard-copy and report printing

Uninterrupted power supply

Uninterrupted power supply is used for control room operator stations.

Control panels

Common control panel

The common control panel (CFA901) contains the mimic diagram for the plant's Medium-Voltage system, and operating switches, buttons and meters for synchronising. It also contains the common PLC system.

The control panel (CFA901), contains the following equipment:

Programmable Logic Controller (PLC) unit for plant control and supervision of the common systems of the plant. The high-grade PLC integrates the control functions as required by the process and operation sequences.

The PLC includes the following units and devices:

- Power supply for CPU (110 VDC)
- Central Processing Unit (CPU)
- Communication card
- Digital input and output cards
- ~ Analogue input cards

Double frequency meter (for synchronising) Double voltage meter (for synchronising) Synchronoscope (for synchronising)

Manual synchronisation control interface unit with:

- Synchronising mode selector switch (auto/manual)
- Generating set voltage adjustment switch
- Generating set frequency adjustment switch
- Synchronising breaker close control pushbutton
- Safety relay reset pushbutton
- Indication lamp test pushbutton

Auto-synchroniser relay

Check synchroniser relay

Safety relay for emergency circuit

Mimic diagram for the electrical system

Emergency stop pushbutton

Generating set control panel

The generating set control panel (CFC 0_1) contains selectors for the generating set operating mode, meters, manual control interface for manual control, the Power Monitoring Unit, the protection relays and the hardwired engine-shutdown and breaker-trip circuits. In auto-mode, the PLC system together with the automation system performs the starting and stopping sequences automatically and sets the active load and the power factor references for the primary controls according to the set points entered into the WOIS workstation. The automation system and the PLC supervise the status of the generating set constantly, regardless of the running mode.

The generating set control panel (CFC0_1), includes the following equipment:

Programmable Logic Controller (PLC) unit for control and supervision of the generating set. The high-grade PLC integrates the control functions as required by the process and operation sequences. The PLC also handles the start/stop sequence, process measurements and alarms.

- Central Processing Unit (CPU)
- Communication card
- Analogue measurement Input Output cards (project-specific)
- Digital Input Output cards (project-specific)

Set of conventional panel-mounted meters for:

- Current meters, one per phase
- Voltage meter
- Power factor meter
- Active power (MW) meter

Generating set emergency stop push-button

Power monitoring unit (PMU)

The PMU is a digital power monitoring unit where the generating set's electrical measurements can be monitored and supervised.

The PMU includes the following functions:

- Measurement of phase currents, with stored minimum and maximum
- Measurement of main and phase voltages, with stored minimum, maximum and average
- Measurement of frequency
- Calculation of Active, Reactive and Apparent power
- Calculation of Active and Reactive energy, imported, exported and total
- Calculation of harmonic distortion
- Calculation of Power Factor

- Measurement of engine running hours

Generator protection relay

The protection relay has the following protection functions:

- Over- and under-voltage protection
- Over- and under-frequency protection
- Reverse power protection
- Over-current and short-circuit protection
- Earth fault protection
- Loss of excitation protection
- Negative sequence (unbalance) over-current protection
- Directional earth fault protection
- Voltage restrained over current protection
- Thermal overload protection
- Residual voltage protection

Generator differential protection relay

The digital programmable differential protection relay is connected to current transformers in the generator cubicle and in the generator's main terminal box.

Manual control interface with:

- Generating set control mode selector switch (Auto-Manual)
- Active power control mode selector switch (Speed droop-kW control)
- Reactive power control mode selector switch (Voltage droop power factor control)
- Engine power control switch (decrease-increase)
- Generator voltage control switch (decrease-increase)
- Synchronising select and start of synchronisation control switch
- Engine start pushbutton with engine running indication light
- Engine stop pushbutton with engine stopped indication light
- Breaker close pushbutton with breaker closed indication light
- Breaker open pushbutton with breaker opened indication light
- Engine shutdown indication light with reset pushbutton
- Breaker trip indication light with reset pushbutton

- Indication lamp testing pushbutton

Safety relay for emergency circuit

Auxiliary module panel (mounted on the Engine auxiliary module)

The engine auxiliary panel includes breakers and controls for the electric motors and the generating set's heaters as indicated below. It is also equipped with indicator lamps and alarms. The panel controls the following motors and heaters (if applicable):

- Generator anti-condensation heaters
- Pre-lubricating oil pump
- Fuel booster pump
- Turning gear motor
- Preheating circulating pump
- High-temperature cooling circuit preheaters
- Air filters (if motorised)
- 16A Outlet socket

MEDIUM VOLTAGE SYSTEM

Neutral point cubicle

The neutral point cubicle includes the following main equipment:

Neutral grounding resistor 5 A, 10 s

Single pole disconnectable link Current transformers (single phase) for earth fault

LOW VOLTAGE SYSTEM

The low-voltage system distributes low-voltage electricity to electrical consumers included in Wärtsilä's scope of supply.

The low-voltage system includes the following equipment:

Low voltage switchgear

The low-voltage switchboard is a steel-sheet-enclosed, cubicle-type switchboard that feeds motor control centres, motors and other apparatus of the power plant delivered by Wärtsilä.

The switchboard includes the following main equipment:

Incoming feeder(s) with Main switch Voltage meter with selector switch Ammeters Fused outgoing feeders for local control panels

Motor starters direct on line for supplied electric motors External protection class: IP3x

Automation level and CCR layout

a) Control mode & automation level

(a) Internal Combustion Engines will be controlled by OEM local control panel supplied by engine vendor. And data will be linked with DCS, only for monitoring.

(b) BOP systems will be monitored and controlled by DCS in Central Control Room.

(c) The following table lists main I&C control system for this project:

SN.	System/ equipment	Type of control	Control location	Interface with
No		system		DCS
1	Internal Combustion	internal	LCP&CCR	Communication
	Engines	combustion		
		engínes control		
		panel		
2	D.M. water system	DCS	CCR	Hardwired
3	Waste water treatment	DCS	CCR	Hardwired
	system	I		
4	Chemical dosing system	DCS	CCR	Hardwired
5	Fuel Gas system	DCS	CCR	Hardwired
6	Lubricating oil system	DCS	CCR	Hardwired
7	Air Compress System	DCS	CCR	Hardwired
8	CEMS	PLC	LCR	Hardwired

b) CCR Layout

There will be one Central Control Room (CCR). DCS operator stations, fire alarm panel and printers will be laid in CCR. Operator stations of DCS. DCS cabinets and power cabinets etc. will be laid in Electronic Equipment Room (EER).

For BOP systems, D.M. water system, waste water treatment system and fuel gas system etc. will be controlled by DCS directly. Relevant local electronic equipment rooms will be located in respective BOP building.

c) The configuration of plant control system

The main parts of instrument and control system will be provided for this project as follows:

(a) Distributed control system (DCS), the main function of DCS includes data acquisition system (DAS), modulating control system (MCS), sequence control system (SCS)and electrical equipment control system.

(b) The control systems of internal combustion engines (will be supplied by Internal combustion engines vendor) will have interface with DCS.

(c) Stack CEMS.
(d) Fire protection and detection system.
(e) Other control system.
Preliminary configuration, please refer to drawing F0418T-K-01

Distributed Control System (DCS)

A microprocessor based distributed control system (DCS) will be supplied. The DCS will accommodate the major modulating and sequence controls of the unit to a high degree of automation. The CCR control console will enable the facility centralized and automatic operation with minimal staffing level.

The DCS will consist of distributed processing units, the data communication system and the manmachine interface etc.

The DCS will be designed to achieve high levels of reliability by appropriate redundancy and selfdiagnosis function.

The main function of DCS includes: data acquisition system (DAS), modulating control system (MCS), sequence control system (SCS), and electrical equipment control system.

Data acquisition system (DAS)

DAS will be the main monitoring method for unit operations (including all normal, emergency, startup, shut-down operations). Through Man-Machine Interface (MMI) such as TFT and printer etc., DAS will provide various processes I/O, operation information and abnormity alarm to the operator to meet control requirements, and will provide a reliable and flexible interface between operator and machine based on TFTs of DCS. The main functions as follows:

- Acquires all kinds of process variables. Process variable includes primary parameter, second parameter (calculated value) and condition of equipments.
- Input signal treatment: correctness differentiates of input signal, digital filter, nonlinearity adjustment, cold junction compensation and open circuit check, engineering unit transform, validity check of digital value junction and pulse signal input accumulation etc.
- Alarm limit value check and over limit alarm: fixed limit value check and over limit alarm, variable limit value alarm, limit value alarm, multilevel alarm, grouping alarm and alarm cut out etc.
- Digital value change state treatment: running status change record, operating record, and running time accumulation of important auxiliary machines.
- Events post trip logging: automatically print out some important parameters in a period of time before and after trip.
- Secondary parameter calculates: compose analog value, compose digital value and calculate average value etc.
- Tabling and logging: periodic logging (shift sheet, daily sheet etc), automatic logging (including: alarm logging, digital value change state logging), request logging (including: group parameter logging, post trip logging, trend logging, historical data logging, alarm schedules and other schedules logging etc), TFT display logging etc.
- TFT display: display various pictures (including símulated drawings, bar drawings, graph, group display drawings, control system drawings and various schedules etc.), pop-up picture, edit picture etc.
- Operation guide: awaking and guide for startup/shut down units, best operation, preventing

and deal with accident etc.

- Trend display: including real trend and historical trend, and its parameters can be set by operators.
- Historical data storage and retrieval: including basic function of display, reports forms log, historical data storage and retrieval etc.

Modulating control system (MCS)

Modulating control system or called Closed Loop Control System (CLCS) will be one of the most important control systems.

The detailed closed loop of modulating control system will be submitted during engineering stage.

Sequence control system (SCS)

SCS or called Open Loop Control System (OLCS) will be digital control system. It will be one of the *important control systems of unit.*

SCS will be composed of some different function groups which are defined according to process system. Each function group will achieve specified start-up/shutdown function. There are three classes (viz. function class, sub-function class and driver class) in SCS. Sub-function class and function class will be the main control mode of this project. Process can be controlled by auto, manual or sequence modes.

Other control systems

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Internal combustion engines control system

The internal combustion engines local control panel will be supplied by internal combustion engines vendor. The control mode will be as per vender's standard. Local control panel for each internal combustion engines will be laid in local for control. The internal combustion engines control panel will have data link interface with DCS for monitoring.

Continuous Emission Monitoring System (CEMS)

The continuous emission monitoring system will mainly be intended for analysis of flue gas to stack. CEMS will be sample extraction type, and will measure the concentration of:

- Flue gas temperature
- Flue gas pressure
- Flue gas flow
- Flue gas CO
- Flue gas NOx
- Flue gas SO₂
- Particle concentration

There are total one CMES control system and two sets of analyzers for monitoring all the above parameters for all the stacks.

Main I&C equipment

Distributed control system (DCS)

General

The DCS system will provide these functions for unit and it's associated auxiliaries, such as comprehensive process monitoring and control, displays, alarming, calculations, data logging, data display, data storage and retrieval, and so on. Processor, communication network, communication module and power supply of DCS will be configured dual-redundantly.

MMI & peripherals

The MMI and peripherals of DCS will be provided as follows:

- Operator stations ~ 2 Nos. (with 22" TFT, mouse and key board)
- Engineering station 1No. (with 22" TFT, mouse, key board)
- Laser printers 4 Nos.
- WOIS 3 Nos.(Suppled by vendor)
- WISE 1 No. (Suppled by vendor)

Redundancy

In order to establish a high degree of DCS reliability, following system components will be provided in redundancy.

- Dual redundant power supplies
- Dual redundant processors
- Dual redundant communication buses

Remote I/O

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Remote I/O will be a part of DCS. Remote I/O will be adopted for monitor signals that are far from electrical equipment room etc. The local remote I/O cabinets can meet the requirement of the temperature, humidity and dustproof etc. The air condition will be considered for local electrical equipment rooms.

Communication interface

Perfect and reliable standard communications interfaces will be provided for connecting DCS with other control systems, such as internal combustion engines control systems, etc.

Local devices and instruments

The local devices and instruments will be adopted to meet the control function requirement for unit startup, continuous running and safe shutdown.

Transmitters, switches, thermocouples, RTDs, etc. transmitting instruments utilized to measure the plant process parameters will be provided to support control, monitoring, alarm and protection, and will hardwire to control systems etc. control systems. Local indicators, such as pressure gauges, thermometers, level gauges etc. are also provided for maintenance and local monitoring. All impulse lines, fittings, valves and welded parts of instrument will be compatible with the process demand. I&C Cable and cable tray

The control and instrument cable will choose flame retardant type. Cables for binary input signals will be overall shielded and cables for analog signals will be individual pair shielded. High-temperature-resistant cable will be adopted in high temperature zone.

The instrument cables will be installed in galvanized steel cable trays or conduit. Galvanized covers will be installed on cable tray in such place where protection from accumulation of dust or debris or sparkle is required.

6. Proposed Layout

As provided by EPGE, the land area of about 50,750 square meters, is located at the Bellin 230 kV substation.

The proposed site layout is shown in the drawing attached.

7. 132 kV Transmission

The plant will be connected to Bellin 230 kV substation by installing a new 132 kV switchbay with required protection equipment.

The Single Line Diagram is attached.

The supplier and Country of Origin

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SYSTEM	EQUIPMENT	SUPPLIER NAME	COUNTRY
Electrical system	Generator	Shandong Power Equipment Co., Ltd.	China
	transformers	Xian XD Transformer Co., Ltd.	China
		Shandong Taikai Transformer Co., Ltd.	China
		Shandong Luneng Mount.Tai Electric Equipment Co.,Ltd.	China
	MV switchgears	Tianshui Changcheng Switchgear Factory Co.,Ltd.	China
		Jiangsu Dago Changjiang Electric Co., Ltd.	China
		Shandong Taikai Vacuum Switch Co., Ltd.	China
		XD Baoji Electric Co., Ltd.	China
		Ningbo Tianan Smart Grid Technology Co., Ltd.	China
÷	LV PCC &MCC	Tianshui Changcheng Switchgear Factory	China
	Switchgears	Co.,Ltd.	
		Jiangsu Daqo Changjiang Electric Co., Ltd.	China
		Shandong Taikai Vacuum Switch Co., Ltd.	China
		XD Baoji Electric Co., Ltd.	China
		Ningbo Tianan Smart Grid Technology Co., Ltd.	Chinə
	Black start	Cummins	China
	diesel	Mitsubishi	China
	generators	Perkins	China
		SWT	China
		AGG	Chína
	132kv AIS	XD	China
	Switchgears	Sieyuan	China
		Taikaì	China
		Pinggao	China
		Jinguan	China
nstrumentation	DCS	Emerson(OVATION)	China

and Control		FOXBORO(EVO)	China
		GE(Nexus)	China
		Siemens(T3000)	China
		Hollysys(MACS)	Chína
	CEMS	Qingdao Yijiehongli Technology Co.,	
		Ltd. (Siemens or Emerson gas analyzer integrated contractor)	China
		Mandrake Environmental Technologies (Beijing) Co., Ltd.(CODEL gas analyzer integrated contractor)	China
		Chongqing Chuanyi Analyzer Co., Ltd.(ABB gas analyzer integrated contractor)	China

8. Gas Supply Infrastructure

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Gas supply infrastructure will be implemented as instructed vide addendum 1 issued by WPGE on 8th February 2018. The preliminary survey was accomplished and engineered.

Material List for 4.85 Miles of a new 10 inches Gas Pipe Line Installation from SEAGP off take to the site for the power plant [EPGE G 02/2017 - 2018 [135] MW Rental Power Plant

No	Description	Qty	Unit	Brand Name	Country of Origin
1	10" Steel Line Pipe (Sour Service Steel) ERW, API 5L, PSL 2, 10" (273.0 mm	7805	mtr	Shandong Kerui Petroleum Equipment	Chìna
	11.13 mm), Sch 80, X 42 BE, 3 LPE Coated (3.5 mm), DIN 30670 DRL (11.6m ~ 11.8m)),		Co.,Ltd.	
	10" Ball Valve 600# Body A105	3	set	KVC/Fukuyama	UK/Japan
	Stem FnA+ENP Ball A105+ENP				
2	End RF Type Trunnion				
	Opetation Worm gear Including 2nons of flanges, 2nons o	f			
3	Gaskets and Stud Bolts& Nuts Heat Shrinkable Sleeve	25	Rolls	Covalence	USA

4	Closure Patches	700	Nos	Raychem	USA
5	E 6011 electrode 3.2 mm	0.118	Tons	Lincoln	Indonesia
6	E 6011 electrode 4.0 mm	0.354	Tons	Lincoln	Indonesia
7	Pipe Fittings	1	lot		China
	10" Schl 80 Tee			Equipment Co.,Ltd.	
	10" Schl 80 Elbow 45 Deg				
	10" Schl 80 Elbow 90 Deg				
	14" x 10" Schl 80 Reducer	_			

Following standards will be complied.

10" Steel line pipes Reference Standards

- 1. API SL Specifications for Line Pipe (Latest Edition)
- International Standard ISO 3183, Znd Edition, Steel Pipe for Pipeline Transportation Systems
- 3. NACE TM 0284 : 2011
- 4. Hardness Testing on Parent metal, HAZ and weld Zone ASTM E 92
- 5. Tensile Testing ASTM A370
- 6. PSL 2 pipe ordered for Sour Service, Annex H of ISO 3183 (API 5L)

Heat Shrinkable Sleeve

Specification: Covalence WPC 100M

- 1. Maximum operation temperature -80 deg.C
- 2. Min preheat temperature -90-100 deg.C
- 3. Peel to steel (AST D- 1000 Std) 42lb/in@ 23 deg.C
- 4. Impact Resistance (ASTM G 14) ≥ 95 in-lb
- 5. Penetration Resistance (ASTM G 14) -No holiday @10kV @65 deg. C
- 6. Product Thickness $\geq 3mm (1.4-1.6)$

Closure Patches : Covalence WPCP

Welding Electrode

Electrodes conforming to AWS Class E-6011

Coating	High Cellulose Electorde
Welding Current/Position	DCEP, DCEN, ALL POSITION
Tensile Strength	62000 to 70000 psi
Yield Strength	48000 to 64000 psi
Elongation	22 ~ 30 %
Charpy V-Notch Toughness	20 -53 ft-lb at -30 deg.C
Container Type	15 Kg easy open can (Airtight sealed metal container)

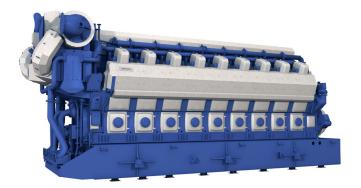


Wärtsilä 50SG Engine generating set

PRODUCT LEAFLET

TECHNICAL DATA

Cylinder configurations	18V
Cylinder bore	500 mm
Piston stroke	580 mm
Speed	500 rpm (50 Hz) 514 rpm (60 Hz)
Brake mean effective pressure	22 bar
Mean piston speed	9.7 m/s (50 Hz) 10 m/s (60 Hz)



RATED ELECTRICAL POWER (kW)

Generating set type	50 Hz	60 Hz
18V50SG	18440	18880
18V50SG with turbogenerator	18690	19130

GENERAL CONDITIONS

Rated electrical power is given at generator terminals and ISO 3046 conditions.

All Wärtsilä engines, in a standard configuration, have engine-driven lubricating oil, low- and high-temperature circuit cooling water pumps. Gas LHV >28 MJ/Nm³. Gas methane number >80. Gas pressure >5.1 bar(g) at plant inlet.

Please contact Wärtsilä for project-specific performance figures in case the gas does not fulfil the aforementioned criteria.

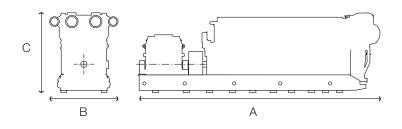
SPECIAL CONDITIONS

Site conditions and applicable emission limits may have an impact on the heat rate and efficiency. Please contact Wärtsilä for project-specific performance figures.

DIMENSIONS (MM) AND WEIGHTS (TONNES)

Generating set ¹ type	Length (A)	Width (B)	Height (C)	Dry weight ² +/- 5%	Reduced transportation weight ³ +/- 5%
18V50SG	18781	4090	6020	365	210

V-CONFIGURATION



- 1 The listed dimensions of generating set are maximum transportation dimensions, excluding the spring-mounted shock absorbers and turbocharger inlet cones for V engines.
- 2 Generating set dry weight includes spring-mounted shock absorbers and inlet cones, excludes lube oil and cooling fluids.
- 3 In case of limitations in maximum allowed transport weight, the generating set can be further disassembled for separate shipment of engine, generator and common baseframe. The listed reduced transportation weight is the weight of the heaviest of these parts. Please contact Wärtsilä in case transport weight needs to be further reduced.

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0 GENERAL

0.1 EXECUTIVE SUMMARY

General

This technical specification provides the reader with the basic technical data required for an evaluation of the plant's technical features.

The proposed Modular power plant is designed and engineered in accordance with this technical specification.

The technical data stated in this document is for guidance and evaluation purposes only. Performance data and related reference conditions are separately stated in the supply contract documents.

The governing law and the procedures of dispute resolution for this technical specification, shall be as stipulated in the Agreement supply contract. If there is any discrepancy between the English version and a translated version of this technical specification, the English version shall prevail and have precedence over the translation.

Design and construction

The essence of the design is simplicity, safety and reliability.

The equipment is designed to prevent accidental contact with moving, hot or tensional parts and to minimise ingress of dust and dirt.

The structure and layout design of the power plant permits access to all parts for inspection, maintenance and repair.

Wärtsilä quality procedures and test & inspection procedures are applied to ensure product quality throughout the design and manufacturing process. Special attention is paid to the engine and auxiliary unit testing, as well as inspection and testing of the final installation.

Wärtsilä's quality and environmental management systems fulfil, and are certified according to, ISO 9001:2000 and ISO 14001:2004.

Main parts and devices like panels, valves, pumps, etc. are marked with engraved name plates indicating their item codes used in Wärtsilä documentation and manuals.

English is used in all documents, correspondence and nameplates.

SI units of measurement are used in all technical documents.

The design and manufacture of power plant equipment supplied by Wärtsilä is subject to constant review, and due to improvements and optimisation of materials, design and tooling techniques, manufactured equipment may be improved from the specification given below.



Deviations to assumptions made in this specification

If the purchaser's requirements, local building codes, zoning requirements, Grid/Interconnection Study, Environmental Impact Assessment, Building Permit Application, Soil investigation, Topographical survey, Contamination evaluation or site Demolition requirements or other conditions deviate from the assumptions made herein and have an impact on Wärtsilä's scope of supply, the scope of work shall be reviewed, and the price adjusted accordingly.

Project Management and Engineering

The delivery of the Modular power plant will be managed by a dedicated project team, comprised of a project manager who has the overall responsibility for the delivery. The project manager is assisted by project engineers for the main technical disciplines.

The project team is the single point of contact with the purchaser's organisation, and has full authority to decide technical and commercial issues related to the project on behalf of Wärtsilä.





0.2 TYPE OF PRODUCT

The proposed Modular power plant is designed for base load operation and is intended for power generation.

The system is designed for parallel operation with the public supply system.

The Modular power plant is designed to use Natural gas as the main fuel.



0.3 MAIN DATA AND CONDITIONS

Configuration

The Modular power plant is equipped with 9 engines of the W18V50SG engine type as the prime mover.

Main data and conditions gives the allowed operating range for the finalised Power Plant.

Design ambient temperature

Altitude above sea level Ambient air temperature	100 35	m ℃
Maximum ambient temperature		
Maximum ambient air temperature	40	°C
Minimum ambient temperature		
Minimum ambient air temperature Relative humidity at minimum ambient temperature	15 100	°C %



0.4 OPERATION MEDIA

General

To maintain the components and equipment of the Modular power plant in good operating condition, and to minimise wear and tear, it is of utmost importance that all operating media used are of good quality and within the specifications given by Wärtsilä.

Below are the main parameters for the major operating media of the Modular power plant. The complete specification and requirements for all the operating media needed are given in the Operation and Maintenance Manuals delivered for the Modular power plant.

Fuels

Wärtsilä engines are designed and developed for continuous operation on fuels with a quality within the recommended limits below. These values indicate the limits for the power plant and the individual limits for the engines. Fuels having one or several values close to this limit might have a negative impact on the performance and component lifetime.

Gas fuel

Parameter		Limit	Unit
Lower heating value (LHV) ¹ for system design Methane number ² , engine performance related Lower heating value (LHV) ³ , engine performance related	Minimum Minimum Minimum	38.0 80.0 30.0	MJ/m³N
Methane contents, CH_4 Hydrogen sulphide, H_2S Total sulphur ⁴ Hydrogen, H_2 Carbon dioxide Water and hydrocarbon condensates before the engine Ammonia Chlorine + Fluorines Particles or solids, content Particles or solids size	Minimum Maximum Maximum Maximum Maximum Maximum Maximum Maximum	70 0.05 5 3 20 Not Allowed 25 50 50 50 5	vol -% vol -% mg/kg vol -% vol-% mg/m ³ N mg/m ³ N μm
Gas inlet temperature	Minimum/ Maximum	0 ⁵ / 50	°C

¹ Values given in m³_N are at 0 °C and 101.3 kPa

² Methane number (MN) calculated according to EN 16726. Minimum value depends on the receiver temperature.

- 3 Values given in $m^3{}_N$ are at 0 °C and 101.3 kPa
- ⁴ Applies when CO catalyst is used
- ⁵ Minimum of 15°C above gas fuel dew point

WÄRTSILÄ	Project r	ame	135MW Kyaukse	e Rental
Gas pressur	e to gas regulating unit	Minimum	1 4.9 ⁶	bar (g)

Engine cooling water

Corrosion inhibiting additives must be used in the engine cooling water. Only additives of the brand and types approved by Wärtsilä are allowed to be used. The additive manufacturer's dosage, pH, and testing recommendations shall be followed.

If a nitrite-based corrosion inhibitor is used, the aim should be to keep a nitrite (NO2) content of approximately 1500 mg/l, calculated as nitrite. The pH shall be between 8.5 and 9.5.

The limits for engine cooling (primary circuit), turbine washing, and separator operating water must meet the following requirements:

pH at 25°C Conductivity at 25°C (limit for turbine	>6.5 <100	- mS/m
washing only)		
Total hardness Ca2+ + Mg2+	<10	°dH
Silica as SiO ₂	<50	mg/l
Chlorides CI-	<80	mg/l
Sulphates as SO ₄ ²⁻	<150	mg/l

The general appearance should be clear, colourless, and free of undissolved materials.

Charge air

The highest allowed concentration of impurities at the charge air inlet is:

Chlorides (CI-)	1.5	mg/Nm3 ⁷
	1.16	mass-ppm
Hydrogen Sulphide (H ₂ S)	375	μg/Nm3
	0.25	volppm
Sulphur Dioxide (SO ₂)	1.25	mg/Nm3
	0.43	volppm
Ammonia (NH ₃)	94	mg/Nm3
	0.125	volppm
Minimum filtration class	F5	EN 779:2002

⁶ Dependent on the lower heating value (LHV) of the gas. Minimum pressure given at LHV minimum 36 MJ/ m_{N}^{3} , if LHV is lower, minimum required pressure will increase.

⁷ Nm3 given at 0 °C and 1013 mbar



Lubricating oil

Only lubricants that are approved by Wärtsilä are allowed to be used. The major lubricating oil suppliers have certain lubricating oils which are approved by Wärtsilä.

The properties of the fresh lubricating oil must meet the following requirements:

Viscosity class		SAE 40	
Viscosity Index (VI)	Minimum	95	
Sulphated Ash Level	Maximum	0.6	% mass
Alkalinity (BN)		4 - 7	mg KOH/g



Project name





0.6 CODES AND STANDARDS

The design complies with the following standards:

Mechanical systems

The mechanical systems are designed, manufactured, constructed and installed according to the appropriate extent of the following standards:

Description

- Engine test run
- Vibration
- Design
- Pipe design calculations
- Welding
- Stairs and platforms
- Dimensional standards for installation materials (pipes, beams, etc.)
- Vertical tanks
- Horizontal tanks
- Typical material standards

Code ISO 15550 except for the fuel consumption calculation, which is based on Wärtsilä's experience of this engine type. ISO 8528 part 9 EN 12100 EN 13480 and DIN 2413 EN 1011 ISO DIN, ISO, SFS and EN

API 650 or EN 14015 EN 12285, excluding nozzle location DIN, SFS and EN

- Abbreviations
 - DIN: German Standard (Deutsche Institute für Normung)
 - EN: European Standard
 - ISO: The International Organization for Standardisation
 - SFS: Finnish Standards Association
 - API: American Petroleum Institute

Electrical systems

The electrical systems are designed, manufactured, constructed and installed to applicable parts according to the following standards:

Description

- Generator
- · Transformer, oil-type
- Transformer, dry-type
- MV switchgear
- LV switchgear
- Enclosure protection
- WOIS workstation hardware
- WOIS workstation software
- Earthing network
- Control panels
- PLC software
- Lighting installation
- Fire detection
- Protection against lightning

Code IEC 60034 IEC 60076 IEC 60076 IEC 62271-200 or IEC 62271 IEC 61439-2 IEC 60529 IEC 60950 Applicable parts of VDE 3699 IEEE 80 IEC 60439-1 IEC 61131-3 IEC 60598 EN 54 IEC 62305



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Abbreviations

IEC:	International Electrotechnical Commission
IEEE:	Institute of Electrical and Electronics Engineers
EN:	European Standard
VDE:	The Association for Electrical, Electronic & Information Technologies
WOIS	Wärtsilä Operator's Interface System

Project name



A POWER GENERATION EQUIPMENT

A1 GENERATING SET



Figure 2 Example of a Wärtsilä 18V50SG generating set arrangement

Project name

The W18V50SG engine and generator are mounted on base frames. The base frames are flexibly mounted on a concrete foundation by means of steel springs.

The main dimensions of the W18V50SG generating set are⁸:

Length	18.781	m
Width	4.09	m
Height	6.02	m
Weight (dry)	364870	kg
Weight (wet)	379870	kg

A1.1 ENGINE

Wärtsilä 18V50SG engine

General engine description

The Wärtsilä 50SG engine is a spark-ignited lean-burn gas engine. The engine works according to the Otto cycle. Gas is mixed with air before the inlet valves, and the gas-air mixture is compressed during the compression phase. Gas is also fed into a small pre-chamber, where the gas mixture is rich compared to the gas in the cylinder. At the end of the compression phase, a spark plug ignites the gas-air mixture in the pre-chamber. The flames from the nozzle of the pre-chamber ignite the gas-air mixture in the whole cylinder. After the working phase, the exhaust gas valves open, and the cylinder is emptied of exhaust gases. The intake air is turbocharged and intercooled.

⁸ The dimensions and weight may vary depending on the generator make and type.



Due to a high degree of integrated functions on the engine, only a minimum amount of support from external systems is needed, thus minimising the interconnections to external systems. An embedded engine control system controls the combustion process individually in each cylinder.

The engine is designed for continuous operation on gas

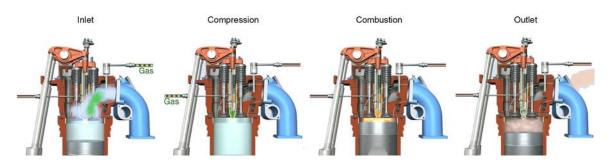


Figure 3 The combustion process

Engine main data

Configuration Number of cylinders	V 18	
Cylinder bore	500	mm
Stroke	580	mm
Speed	500	rpm
Mean effective pressure	22	kPa
Mean piston speed	9.67	m/s
Compression ratio	11.5:1	
Number of inlet valves	2	
Number of outlet valves	2	
Direction of rotation facing towards flywheel	Clockwise	

Engine block

The engine block is made of nodular cast iron and is cast in one piece; it incorporates the jacket water manifold and the camshaft bearing housings. The crankshaft is underslung-mounted on the engine block.

The bearing caps, also made of nodular cast iron are fixed from below by hydraulically tightened screws. They are laterally guided by the engine block both at the bottom and at the top. The horizontal side screws at the lower guiding are hydraulically tightened as well. Together this provides a very rigid crankshaft bearing. A combined flywheel/thrust bearing is located at the driving end of the engine.

The oil sump is of a light welded design, and mounted below the engine block. It is sealed by O-rings.

Crankshaft

The crankshaft is made of high tensile steel, and forged in one piece. It is fully balanced to counteract bearing loads from eccentric masses. The high degree of balance results in an even and thick oil film for all bearings.



Connecting rod

The connecting rod is made of forged alloy steel and it is partially machined. All connecting rod bolts are hydraulically tightened. The gudgeon pin bearing is of tri-metal type. Oil is led to the gudgeon pin bearing and piston through a bore in the connecting rod. The connecting rod is of a three-piece design, which makes it possible to unmount the piston without opening the big end bearing.

Main bearings and big end bearings

The main bearings and the big end bearings are of tri-metal design, with a soft and thick running layer.

Cylinder liner

The cylinder liners are centrifugally cast from a special alloyed iron to create wear resistance and high strength. The top collar of the cylinder liner is provided with bore cooling for efficient control of the liner temperature. The liner is equipped with an anti-polishing ring at the top, to prevent bore polishing.

Piston

The piston is of composite type with a steel crown and a nodular cast skirt. The piston skirt and cylinder liner are lubricated by a unique piston skirt lubricating system. The piston top is cooled by the cooling gallery design. The piston ring grooves are hardened. The piston ring set consists of two compression rings and one spring-loaded oil scraper ring. The piston rings are located in the piston crown.

Cylinder head

The cylinder head is made of nodular cast iron, and it is fixed to the cylinder block/liner with hydraulically tightened bolts. Each cylinder head has two inlet and two exhaust valves; all valves are equipped with rotators. The exhaust valve seats are directly water cooled. The valve seat rings are made of specially alloyed iron with good wear resistance.

Camshaft and valve mechanism

The cams are integrated in the drop-forged shaft material. The journal bearings consist of separate pieces, which are fitted to the camshaft pieces by flange connections. This solution makes it possible to remove individual cylinder camshaft pieces sideways. The camshaft bearing housings are integrated in the engine block casting. The camshaft is driven from the crankshaft through a fully integrated gear train.

Fuel gas admission system

On the engine, the fuel gas is supplied through common pipes along the engine, and continues with individual feed pipes to each main gas admission valve. There are two common pipes per bank, one for the main gas, and one for the pre-chamber gas supply. The gas pressure in both lines is controlled separately and there is a filter before every gas admission valve.

The main fuel gas is mixed with the intake air before the inlet valve in the cylinder head. Since the gas valve is timed independently of the inlet valve, scavenging of the cylinder takes place without a risk that unburned gas escapes directly from the inlet side to the exhaust side.



The gas admission system is dynamically controlled to maintain the required load and speed. The quantity of main fuel gas admitted to each cylinder is constantly controlled with the combustion pressure and temperature by means of individual gas admission valves for each cylinder.

The **main fuel gas admission valves** function as the engine speed regulator, and the valves control the amount of gas fed to each cylinder of the engine. Each cylinder is equipped with its own fuel gas admission valve. The valve is located on the cylinder head manifold and the gas is fed into the inlet channel of the cylinder head. The main gas valve is a direct actuated solenoid valve. It is possible to adjust the amount of gas fed to the individual cylinders with the engine automation system when the engine is running.

The **pre-chamber gas control valve** is mechanically actuated by the inlet valve yoke, which is directly driven by the camshaft/push rod. It takes care of the gas admission to the pre-chamber. The valve is located in the pre-chamber, and the amount of injected gas is controlled by the gas pressure.

The **pre-chamber** is the ignition source for the main fuel charge. The pre-chamber is optimised to give the best possible ignition, with rapid and repeatable combustion.

Ignition system

An ignition module located on top of each cylinder head cover contains the ignition coil. The module is connected to the spark plug with a high-voltage extension. The spark plug is a high-energy type, specially manufactured for use in gas engines. The spark plug is located in the prechamber, and the timing for the spark is controlled by the engine control system.

Lubricating oil system

The engine has a wet oil sump system. The system lubricates the main bearings and the cylinder liners in the engine. Oil is led through bores in the engine block, and heads to other lubricating points like the camshaft bearings, the rocker arm bearings and the valve mechanism gear wheel bearings. The turbochargers are also connected to the engine lubricating system. Furthermore, the lubricating oil is also cools the piston crowns.

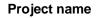
The lubricating oil system built on the engine comprises the following equipment:

- Pipes made of steel
- Oil sump of wet type, equipped with a low-level switch connected to the engine automation system
- Main lubricating pump equipped with an overflow valve. The pump is of screw type
- Start-up/running-in filters in the oil inlet line to each main bearing. These are removed after the engine is commissioned

Starting Air System

The engine is started with compressed air, with a nominal pressure of 30 bar. The start is performed by directing air into the cylinders through starting air valves in the cylinder heads. The starting system includes a slow turning system, which directs a few engine revolutions in the beginning of the starting sequence, as a safety check.

The starting air system built on the engine comprises the following equipment:





- Pipes made of steel
- Starting air master valve, electrically and manually operated
- Start blocking valve to prevent starting when turning gear is engaged
- Starting air distributor
- Starting air valves in A-bank cylinder heads
- Slow turning device
- Flame arrestors

Cooling water system description

The engine is cooled by a closed circuit cooling water system, divided into a high temperature (HT) circuit and a low temperature (LT) circuit.

Thermostatic valves control the LT water inlet, and HT water outlet temperatures. The cooling water is cooled in a separate cooler in the external cooling water system.

The engines are equipped with a two-stage charge air cooling system. The cooler is built onto the engine.

The engine cooling water system is comprised of the following equipment:

- Pipes made of steel
- Engine-driven circulating water pump for the low temperature cooling circuit
- Engine-driven circulating water pump for the high temperature cooling circuit
- Non-return valves after the circulating pumps

Charge air system

The compressor side of the turbocharger feeds air into the cylinders through the charge air cooler and the charge air receiver. The engine is equipped with one turbocharger per cylinder bank. The turbocharger is of the axial turbine type.

The engine charge air system comprises the following equipment:

- Compressor on the turbochargers
- First stage charge air cooler
- Second stage charge air cooler
- Fresh water cleaning device for the compressor

Exhaust gas system

The engine mounted Mono-SPEX (Single Pipe Exhaust system) gas pipes, made of cast iron, with separate sections for two pairs of cylinders. Stainless steel bellows are installed between the sections to absorb heat expansion, and the pipes are fixed by brackets. The engine exhaust gas pipes are fully covered by an insulation box. There are sensors for remote measuring of the temperature after each cylinder, and on both sides of the turbochargers.

The exhaust gas system comprises the following equipment:

- Mono-SPEX system manifold with bellows
- Flexibly mounted insulation box
- Turbine on the turbocharger
- Fresh water cleaning device for the turbine



Turbocharger and air-fuel ratio control system

To maintain a correct air-fuel ratio, the engine is equipped with an exhaust gas wastegate. It keeps the air pressure in the receiver at an optimal level to match the best power output with the emission requirements.

The exhaust gas wastegate valve by-passes the exhaust gases past the turbocharger. The wastegate valve works as a regulator and adjusts the air-fuel ratio to the correct value, independent of variations in the site conditions, such as ambient temperature, humidity and altitude.

The wastegate valve is actuated by compressed air and controlled by the engine control system.

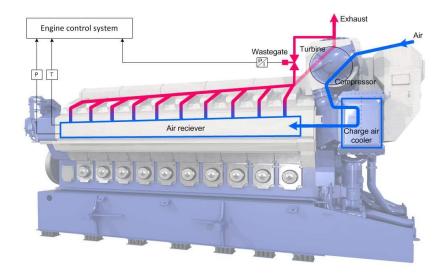


Figure 4 Illustration showing the charge air and exhaust gas system

Wärtsilä Engine Automation

The engine automation system is a completely embedded management system. The engine control system is a distributed and bus-based system where the monitoring and control function is placed close to the point of measurement and control. In this way, both the on- and off-engine wiring is significantly simplified. Advanced diagnostics and control functions provide outstanding performance, and the need for systems outside the engine is significantly reduced.

For the field bus interconnection, Wärtsilä is committed to open standards. The physical interface of the engine control system is a standard Ethernet connection for general process data, to both the WOIS workstation (Wärtsilä Operator's Interface System) and the PLC systems. The system meets even the highest requirements on reliability, with selective redundancy and fault-tolerant design.

The gas admission duration is dynamically controlled by the internal speed controller, to obtain pre-set speed or load reference levels. The quantity of main gas admitted to each cylinder is controlled by cylinder-individual gas admission valves, which are actuated by the CCM cylinder control modules. The amount of gas admitted depends on the gas supply pressure and the time the main gas solenoid valve is open (duration)



High Pmax control strategy is the primary method to adjust the duration of cylinder-specific gas admission.

Project name

Load Ethernet + sharing hardwired signals IOM* CCM* CCM LDU 00000080 LCP ESM MCM PDM * The actual amount of CCM- IOM- and WCD-CANopen modules depend on the cylinder configuration. WCD DC Inputs

Hardware of the engine automation system

Figure 5 Hardware of the engine automation system

The engine automation system comprises the following main equipment:

- ESM safety module
- LDU graphical display for complete on-engine monitoring and communication interface to the plant automation system
- MCM main controller for speed governing, start/stop sequencing and overall engine management
- IOM I/O modules for distributed data acquisition
- CCM cylinder control modules for injector/gas valve control and real-time diagnostics
- PDM distributes, filters, and handles fusing of power supply
- WCD ignition system module
- Sensors
- Actuators & valves

The automation system handles the following major tasks and functions:

- Local interface to the operator, including a local display which indicates all important engine measurements, an hour-counter, and a local control panel.
- Engine start/stop management, including start block handling and slow turning, load reduction, wastegate control, and the LT/HT thermostatic valve control.
- Engine safety (alarms, shut-downs, emergency stops, load reductions) including hardwired safety for engine overspeed, lube oil pressure, cooling water temperature, and external shut-downs.
- Electronic speed/load control with various operation modes.



Sensors for alarm and monitoring

One set of sensors fitted on the engine, which are connected to the external engine control system.

Other Included Items

- Flywheel with fixing bolts
- Electric motor-driven turning device
- Counter flanges for pipe connection
- Crankcase safety relief valves with a flame trap
- The engine has one coat of priming paint and one coat of finishing paint

Engine base frame

The engine is rigidly mounted on the engine base frame. The base frame is a rigid welded steel box construction. The engine part and generator part of the common base frame is bolted together at site to form one rigid base frame.

Flexible connections between engine and external piping

To minimise the transmission of engine vibrations to the plant's piping systems, flexible hoses and bellows are provided for installation between the generating set and external piping systems.

Flexible connections are supplied for the following auxiliary systems:

- Starting/control air
- Cooling water
- Lubricating oil
- Exhaust gas
- Fuel
- Crankcase ventilation

Generator base frame

The generator is rigidly mounted on the generator base frame. The frame is made of welded steel.

The generator part and the engine part of the common base frame are bolted together on-site to form one rigid base frame.

Set steel springs

Steel spring type vibration isolation units are installed between the common base frame and the concrete foundation block. The number of steel spring units for each type of generating set is determined by the weight of the generating set and an analysis of the natural frequency of the rigid body. A fitting plate is installed between the common base frame and the steel spring packages to adjust to the level of the surface of the foundation block.



Engine maintenance platform - prefabricated

Partly prefabricated maintenance platforms are provided for easy maintenance and access to the engine. To minimise vibrations, the platforms and stairs are freestanding on the floor and not connected to the engine.

A1.2 GENERATOR

Generator - 11000 V

Generator type

The generator is of the synchronous, three-phase, brushless, salient pole type.

Generator main data

Generator apparent power Rated power factor	23019 0.8	kVA
Nominal voltage	11000	V
Rated current (In)	1208	А
Voltage adjustment range	±5	%
Frequency	50	Hz
Speed	500	Rpm
Continuous short-circuit	>2.5 x In	
current		
Insulation class	F	
Temperature rise stator	F	
Temperature rise rotor	F	
Cooling method	Air cooled	
Enclosure	IP23	
Standard	IEC60034	

Generator construction

The generator is designed to operate together with a reciprocating engine. The stator frame is constructed with a rigid welded steel structure. The stator core is built of thin electric steel sheet laminations. The rotor consists of a shaft and salient pole type main revolving field.

The generator achieves very high efficiency because of the exceptional thermal conductivity created by the tight fit between the coils and the stator core.

Terminals

The six stator winding ends are brought to terminal boxes on the generator sides. Terminals for monitoring and auxiliary equipment have separate terminal boxes.

Damper winding

The generator is provided with a damper winding for parallel operation with other generators and with a separate power grid, if so connected.



Shaft and bearing

The generator is horizontally mounted and provided with two sleeve bearings. The generator rotor is designed to minimise the effect of torsion rotor oscillations due to system disturbances and rapid load changes.

Excitation

The exciter is of the brushless type with a rotating armature/rectifier assembled on the same shaft as the main generator rotating armature. The exciter field is controlled by the automatic voltage regulator (AVR). The rectifiers are of the silicon diode type in a full wave bridge arrangement. The rotating armature and stationary field of the exciter are insulated with Class F materials.

Cooling (air-cooled)

The generator is air-cooled. A fan mounted on the generator shaft takes cooling air from the engine hall, through washable filters, and passes it through the generator.

Automatic voltage regulator

The voltage regulator is a completely solid state type for control of generator voltage by means of controlling the exciter field. The regulator controls the generator exciter field as required to maintain a constant and stable generator output voltage. (The AVR is installed in the generating set control panel).

Voltage regulation accuracy	± 0.5	%
- within power range	0 – 100	%
- within speed range	95 – 105	%
Voltage setting range	90 – 110	%

Accessories

The following accessories are included with the generator:

- 6 PT-100 elements in stator windings
- 2 PT-100 elements for bearings
- 1 Anti-condensation heater
- 1 Voltage transformer for excitation power and measurement
- 1 Current transformer for measurement
- 3 Current transformers for protection

Flexible coupling

A flexible coupling is used between the engine flywheel and the generator which transmits the torque from the engine to the generator. By using a flexible coupling, the crankshaft is not loaded by any external bending forces. The elements in the coupling are made of radially arranged steel spring packs.



Flywheel cover

A flywheel cover is installed over the flywheel and flexible coupling to prevent access to the rotating equipment during operation.

A2 MECHANICAL AUXILIARY SYSTEMS

Proper function of the Modular power plant depends on the mechanical auxiliary systems. The proposed systems have been optimised for this particular application. The function of these systems is to provide the engine with fuel, lubricating oil, starting air, cooling water, and charge air, of the required quantity and quality, as well as to dispose of exhaust gases in a proper manner.

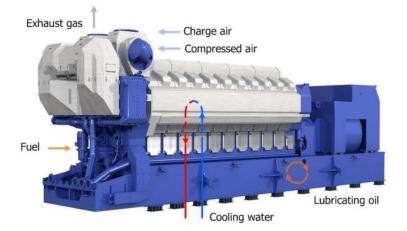


Figure 6 Mechanical auxiliary systems for the engine

A2.1 AUXILIARY MODULES

To ensure installation quality and reduce erection time, Wärtsilä has developed prefabricated auxiliary modules. These modules contain several pieces of auxiliary equipment. This saves significant pipefitting and installation time on-site. The complete module is pressure- and function-tested, then flushed, painted, and corrosion-protected prior to shipment. All external connection points are sealed and covered with steel plates.

Engine auxiliary module

The Engine auxiliary module include several pieces of auxiliary equipment (listed below), and handles the flow of lubricating oil, cooling water and compressed air to and from the engine. The Engine auxiliary module is installed in the front end of the engine with flexible pipe connections.





Project name

Figure 7 Example of a typical Engine auxiliary module

The Engine auxiliary module includes the following main equipment:

- 1 Turbo cleaning water supply
- 1 Lubricating oil heat exchanger
- 1 Lubricating oil automatic filter
- 1 Pre lubricating oil pump
- 1 Lubricating oil thermostatic valve
- 1 High temperature circuit preheating unit
- 1 Low temperature thermostatic valve
- 1 High temperature thermostatic valve
- 1 Auxiliary module panel
- 1 Set piping
- 1 Set valves and gauges



Exhaust gas module

The exhaust gas module includes the auxiliary equipment listed below, and handles the flow of charge air to the engine, and exhaust gas from the engine.



Figure 8 Illustration of a typical exhaust gas module

The exhaust gas module includes the following main equipment:

- 1 Low temperature circuit expansion vessel
- 2 Charge air silencer
- 1 Exhaust gas branch pipe
- 1 Exhaust gas ventilation fan

Pipe rack

The pipe rack connects the auxiliary systems of different generating sets to each other.

Engine auxiliary module platform

A2.2 FUEL SYSTEM

The fuel system provides the engine(s) with fuel of the correct flow, pressure and degree of purity.

A2.2.6 Gas system

The purpose of the fuel gas system is to supply the engine with a constant gas feed of suitable pressure, temperature, and cleanness. It should also shut off the gas supply if any problem arises, and provide ventilation of trapped gas.

The power plant is designed for continuous operation on gas, and the gas system is designed for the agreed project gas fuel quality specified in Section 0.4



The gas fuel system consists of the following equipment:

Main safety shut off valve - engine specific

The main safety shut-off valve unit isolates the gas system in case of an emergency, and the unit is located on the gas inlet pipe outside the engine hall.

- 1 Pneumatically operated shut-off valve
- 1 Manually operated shut-off valve

Gas regulating unit

Each engine is equipped with a gas regulating unit which controls the gas feed pressure to the engine depending on the engine load. The gas regulating unit performs a leakage test of the main shut-off valves after every engine stop or shut-down. There is a separate pressure control line for the gas delivered to the prechamber.



Figure 9 Example of a gas regulating unit

The following components are built onto a steel frame:

Gas filter Manual and automatic vent valves Control valve(s) Instrumentation

Flow meter for gas regulating unit

The gas regulating unit is equipped with a mass flow meter. The meter has an accuracy of 0.5 % at full load.

A2.3 LUBRICATING OIL SYSTEM

The lubricating oil system provides required lubrication for all moving parts on the engine. It consists of the engine's lubricating oil system, which handles the cooling and filtration of the



lubricating oil for the engine itself, and the plant-related lubricating oil system, which handles storage of new and used lubricating oil.

The lubricating oil system consists of the following equipment:

1 Lubricating oil transfer pump - stationary

The transfer pump unit pumps lubricating oil from the storage tank to the engines when topping up or changing oil. The transfer pumps and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The transfer pump unit consists of the following equipment:

2 Electric motor-driven transfer pumps

Pressure

2 bar

Single strainer on pump suction side Thermometer on pump suction side Local control panel Set of interconnection pipes, flanges, seals and valves

Lubricating oil transfer pump mobile

The transfer pump unit pumps lubricating oil to and from the engine when topping up or changing oil, or transfers oil to and from drums as needed. The transfer pumps and auxiliary equipment are built on a wheeled dolly.

1	Electric motor-driven transfer pump		
	Capacity	8.1	m³/h
	Pressure	2	bar
1	Single strainers on pump suction side		
1	Thermometer on pump suction side		
1	Local control panel		
1	Wheeled dolly		
1	Set of interconnection pipes, flanges, seals and valve	es	





Figure 10 Example of a mobile lubricating oil transfer pump unit

Project name

Oil mist separator

Lubricating oil heat exchanger (mounted on the Engine auxiliary module)

The lubricating oil heat exchanger is of plate-and-frame type.

Lubricating oil automatic filter (mounted on the Engine auxiliary module)

The automatic lubricating oil filter is of the self-cleaning type. The cleaning is done by automatic back-flushing. The flushed oil is led to the engine sump.

Pre lubricating oil pump (mounted on the Engine auxiliary module)

Before the engine is started the complete oil system must be filled and the engine adequately primed by the pre-lubricating pump. The pre-lubricating pump is an electric motor-driven pump equipped with a built-on relief valve.

Lubricating oil thermostatic valve (mounted on the Engine auxiliary module)

The thermostatic valve controls the oil temperature to obtain the right temperature before entering the engine.

A2.4 COMPRESSED AIR SYSTEM

Compressed air is produced by a starting air compressor unit and stored in starting air bottles, while instrument air of higher quality is produced in an instrument air compressor unit.

The pressure equipment is designed, manufactured and tested according to the European Union directive 97/23/EC "Pressure Equipment Directive".

The compressed air system consists of the following equipment:

2 Instrument air compressor unit

The instrument air compressor unit produces control, instrument and working air. The compressed air is stored in the built-on air bottle until it is distributed to the different consumers.



The following components are built onto a steel frame, which forms a compact skid unit:

Project name

Electric motor-driven air compressor		
Capacity, each	162	m³/h
Pressure	7	bar
Compressed air receiver		
Volume	0.2	m³
Refrigerated air dryer with control panel		
Dew point	+4	°C
Filter for removal of oil, water and particles		
Common control panel		
Set of interconnection pipes, flanges, seals and valv	/es	



Figure 11 Example of an instrument air compressor unit

1 Starting air compressor unit - single

The starting air compressor units are sized to fill the starting air bottle(s) with the required air for 19 start attempts per total amount of engines in 60 minutes. The starting air compressor and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The starting air compressor unit consists of the following equipment:

	Electric motor-driven air compressor		
1	Capacity	185	m³/h
	Pressure	30	bar
	Pressure switches for starting and stoppin	ng the air compre	essor (24/30 bar)
	Alarm switch for too-low starting air press	ure to engine (18	3 bar)
	Oil and water separators		
	Control centres for manual and automatic	operation	
	Pressure reduction valves for control and	working air (30/6	6 bar)
	Set of interconnection pipes, flanges, seal	ls and valves	





Project name

Figure 12 Example of a single starting air compressor unit

1 Starting air compressor unit - double

The starting air compressor units are sized to fill the starting air bottle(s) with the required air for 19 start attempts per total amount of engines in 60 minutes. One compressor is in stand-by. The starting air compressors and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The starting air compressor unit consists of the following equipment:

	Electric motor-driven air compressors: working		
1	Capacity	185	m³/h
	Pressure	30	bar
	Electric motor-driven air compressor: in stand-by		
1	Capacity	185	m³/h
	Pressure	30	bar
	Pressure switches for starting and stopping the air	compre	essor (24/30 bar)
	Alarm switches for too-low starting air pressure to	engine	(18 bar)
	Oil and water separators	•	. ,
	Control centres for manual and automatic operatio	n	
	Pressure reduction valves for control and working	air (30/6	6 bar)
	Set of interconnection pipes, flanges, seals and va	lves	



Figure 13 Example of a double starting air compressor unit

MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 248445-2017-AQ-FIN-FINAS Initial certification date: 25 October 2017 Valid: 25 October 2017 - 25 October 2020

This is to certify that the management system of

Wärtsilä Energy Solutions

Wärtsilä Finland Oy Puotikuja 1, 65380 Vaasa, Finland and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard: **ISO 9001:2015**

This certificate is valid for the following scope:

Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.

Place and date: Espoo, 25 October 2017





For the issuing office: DNV GL Business Assurance Finland Oy Ab

Kimmo Haarala Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid. ACCREDITED UNIT: DNV GL BUSINESS ASSURANCE FINLAND OY AB, Keilasatama 5, 02150 Espoo, Finland. TEL: + 358 10 292 4200. assurance.dnvgl.com

Appendix to Certificate

Wärtsilä Energy Solutions Wärtsilä Finland Oy

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope
PT. Wärtsilä Indonesia (Jakarta)	GD Tempo LT 19, JI HR Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 15135	Sales and marketing, project management of energy products and solutions.
PT. Wärtsilä Indonesia (Jakarta)	Jl. H.R. Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 12940	Project management, sales and marketing, administration, installation and construction, commissioning of energy products and solutions.
PT. Wärtsilä Indonesia (Jakarta)	Pergudangan Cardig Cargo Group, Jakarta, Indonesia, 13610	Sales and marketing of energy products and solutions.
Wartsila Azerbaijan LLC	Nobel Avenue, AZ1026, Baku, Azerbaijan	Sales and marketing of energy products and solutions.
Wartsila Bangladesh Ltd	SMC Tower (3rd Floor), 33 Banani C/A, Dhaka, Bangladesh, 1213	Administration, sales and marketing of energy products and solutions.
Wartsila Brasil Ltda	Rua Alfândega, 33, 20070-000, Rio De Janeiro, Brazil	Administration, sales and marketing, project management, logistics, installation and construction, commissioning of energy products and solutions.
Wartsila Caribbean, Inc.	PO Box 7039, Carolina, 00987, Puerto Rico	Sales and marketing of energy products and solutions.
Wartsila Ecuador S.A.	La Mancha Business Center, 17050, Quito, Ecuador	Sales and marketing of energy products and solutions.
Wartsila Gulf FZE	Dubai Investment Park, Plot 597-572, 61494, Dubai, United Arab Emirates	Solution and product development, administration, project management, sales and marketing, support functions of energy products and solutions.
Wartsila Muscat LLC	PO Box 212, Bukha, 812, Musandam, Nigeria	Administration, installation and construction of energy products and solutions.
Wartsila Power Contractin	805B, Bin Homran Center, Jeddah, Saudi Arabia, 23432	Sales and marketing, project management, logistics, administratior and support functions of energy products and solutions.
Wärtsilä Argentina S.A.	Tronador 963, 1427, Capital Federal, Argentina	Sales and marketing, project management, administration of energy products and solutions.
Wärtsilä Australia Pty Ltd	48 Huntingwood Drive, Huntingwood, 2148, Australia	Administration, sales and marketing o energy products and solutions.

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Wärtsilä Canada Inc.	1771 Savage Road, Richmond, V6V 1R1, Canada	Installation and construction of energy products and solutions.
Wärtsilä Danmark A/S	Kystvejen 100, 9400, Nørresundby, Denmark	Sales and marketing of energy products and solutions.
Wärtsilä Deutschland GmbH	Schlenzigstr. 6, 21107 Hamburg, Germany	Sales and marketing of energy products and solutions.
Wärtsilä Eastern Africa	ABC Towers, 7A, Nairobi, Kenya, 00800	Sales and marketing of energy products and solutions.
Wärtsilä Finland Oy (Helsinki)	John Stenbergin ranta 2, 00530 Helsinki, Finland	Solution and product development, sales and marketing, administration, project management, sourcing, procurement, support functions of energy products and solutions.
Wärtsilä Finland Oy (Vaasa, Kruunantie)	Kruunantie 36, rakennus HTV1, 65230 Vaasa, Finland	Sales and marketing of energy products and solutions.
Wärtsilä Finland Oy (Vaasa, Opistokatu)	Opistokatu 7, 65100 Vaasa, Finland	Engineering, solution and product development of energy products and solutions.
Wärtsilä Finland Oy (Vaasa, Puotikuja)	Puotikuja 1, 65380 Vaasa, Finland	Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.
Wärtsilä Finland Oy (Vaasa, Tarhaajantie)	Tarhaajantie 2, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.
Wärtsilä Finland Oy (Vaasa, Yrittäjänkatu)	Yrittäjänkatu, 65380 Vaasa, Finland	Administration, sales and marketing of energy products and solutions.
Wärtsilä France S.A.S (Mulhouse cedex)	100 Quai d'Alger - CS 91210, 68054, Mulhouse cedex, France	Project management of energy products and solutions.
Wärtsilä France S.A.S. (Marseille)	Enceinte Portuaire, porte 4, Site CIMM, 13344, Marseille, France	Sales and marketing of energy products and solutions.
Wärtsilä France S.A.S. (Paris La Defence)	76 route de la Demi Lune, 92057, Paris La Defense, France	Solution and product development. Sales and marketing, administration, project management of energy products and solutions.
Wärtsilä India Private Limited (Chennai)	Shreyas Vriddhi, Chennai - 600032, India	Sales and marketing, engineering, project management, installation and construction, commissioning of energy products and solutions.
Wärtsilä India Private Limited (Noida)	B-37, Tower - A, First Floor, Sector - 1, Noida - 201301, India	Solution and product development, sales and marketing, engineering, sourcing, logistics, comissioning, installation and construction of energy products and solutions.

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Wärtsilä India Private Limited (Sanpada, Navi Mumbai)	Kesar Solitaire, Plot no. 5, 21st floor, Sector -19, Palm Beach road, Sanpada, Navi Mumbai - 400705, India	Sales and marketing, engineering, project management, installation and construction, commissioning, logistics, support functions of energy products and solutions.
Wärtsilä India Private Limited (Sardar Patel Road)	D.No.1-8-271, Flat No.109, 1st Floor, Sardar Patel Road - 500003, India	Administration, commissioning, sales and marketing, engineering of energy products and solutions.
Wärtsilä India Private Limited (Shilpata, Navi Mumbai)	Opp. Govt. Rest House, Shilpata, Navi Mumbai - 410203, India	Sales and marketing, project management, installation and construction, commissioning, support functions of energy products and solutions.
Wärtsilä India Private Limited (Urwa Stores)	Third Floor - Aura, Urwa Stores - 575006, India	Engineering, project management of energy products and solutions.
Wärtsilä Italia S.p.A (Milano)	Piazza Duca D'Aosta, 8 - 20124 Milano - Italy	Sales and marketing, administration of energy products and solutions.
Wärtsilä Italia S.p.A (San Dorligo Della Valle)	Bagnoli della Rosandra 334 - 34018 San Dorligo Della Valle - Italy	Administration, sourcing, logistics of energy products and solutions.
Wärtsilä Japan Ltd	6500045 - Kobe 6-7-2 Minatojima	Sales and marketing of energy products and solutions.
Wärtsilä M&P Nigeria	Oba Akinjobi Way, 000000, Lagos, Nigeria	Sales and marketing of energy products and solutions.
Wärtsilä Netherlands B.V.	Hanzelaan 95, 8017 JE, Zwolle, Netherlands	Administration, sales and marketing, support functionsof energy products and solutions.
Wärtsilä North America Inc. (Annapolis)	900 Bestgate Road, Annapolis, 21401, USA	Solution and product development, sales and marketing, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	16330 Air Center Blvd, Houston, 77032, USA	Solution and product development, sales and marketing, project management, installation and construction, commissioning, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	11710 N Gessner Rd, Houston, 77040, USA	Sales and marketing, project management, sourcing, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Long Beach)	2140 Technology Place, Long Beach, 90810, USA	Commissioning of energy products and solutions.
Wärtsilä North America Inc. (Mountlake Terrace)	6306 215th St SW Ste 3, Mountlake Terrace, 98043, USA	Sales and marketing of energy products and solutions.
Wärtsilä North America Inc. (Roxborough)	10577 Wildhorse LN, Roxborough, 80125, USA	Sales and marketing of energy products and solutions.
Wärtsilä Oyj Abp	Puotikuja 1, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.

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Wärtsilä Pakistan (Pvt.)	16 Km Raiwind Road, Lahore, 54000, Pakistan	Sales and marketing, Project management, installation and construction, commissioning, administration of energy products and solutions.
Wärtsilä Peru S.A.C.	Av. Ricardo Palma, Lima, Peru, L18	Sales and marketing of energy products and solutions.
Wärtsilä Philippines Inc	No. 6, Diode Street, 4025, Cabuyao, Philippines	Sales and marketing of energy products and solutions.
Wärtsilä Polska Sp. z.oo	Kubickiego 13, 02-954 Warszawa, Poland	Sales and marketing of energy products and solutions.
Wärtsilä Projects Oy (Turku)	Stålarminkatu 45, 20810 Turku, Finland	Project management, sourcing, procurement, logistics, installation and construction, commissioning of energy products and solutions.
Wärtsilä Projects Oy (Vaasa)	Puotikuja 1, 65380 Vaasa, Finland	Sales and marketing, project management, sourcing, procurement, logistics, installation and construction, commissioning, warranty and support functions of of energy products and solutions.
Wärtsilä Shanghai Service	Room 1125A, Tower B of Nanxincang Busine, Beijing, China, 100007	Sales and marketing, administration of energy products and solutions.
Wärtsilä Singapore Pte Ltd (Singapore)	11 Pandan Crescent, Singapore, Singapore, 128467	Sales and marketing, support functions, administration of energy products and solutions.
Wärtsilä Singapore Pte Ltd (Singapore)	14 Benoi Crescent, Singapore, Singapore, 128467	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Cape Town)	Dorsetshire Street, Cape Town, South Africa, 7405	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Johannesburg)	West Tower, Nelson Mandela Square, Johannesburg, South Africa, 2146	Sales and marketing of energy products and solutions.
Wärtsilä Sweden AB	Götaverksgatan 10, 402 77, Göteborg, Sweden	Sales and marketing of energy products and solutions.
Wärtsilä UK Ltd.	Wärtsilä UK Ltd., 4 Marples Way, Hants, PO9 1NX, United Kingdom	Installation and construction of energy products and solutions.
Wärtsilä Vostok LLC (Moscow)	4th Dobryninsky lane, 8, office E02-300, Moscow, Russian Federation, 119049	Project management, sales and marketing of energy products and solutions.
Wärtsilä Vostok LLC (Saint Petersburg)	Petrogradskaya emb, 36A, Saint-Petersburg, Russian Federation, 197101	Sales and marketing of energy products and solutions.
Wärtsilä-Enpa A.S.	Aydýntepe Mah. E5 karayolu üzeri - 34947 Istanbul - Turkey	Sales and marketing of energy products and solutions.

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MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 248444-2017-AE-FIN-FINAS Initial certification date: 25 October 2017 Valid: 25 October 2017 - 25 October 2020

This is to certify that the management system of

Wärtsilä Energy Solutions

Wärtsilä Finland Oy Puotikuja 1, 65380 Vaasa, Finland and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard: **ISO 14001:2015**

This certificate is valid for the following scope: Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.

Place and date: Espoo, 25 October 2017





For the issuing office: DNV GL Business Assurance Finland Oy Ab

Kimmo Haarala Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid. ACCREDITED UNIT: DNV GL BUSINESS ASSURANCE FINLAND OY AB, Keilasatama 5, 02150 Espoo, Finland. TEL: + 358 10 292 4200. assurance.dnvgl.com

Appendix to Certificate

Wärtsilä Energy Solutions Wärtsilä Finland Oy

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope
PT. Wärtsilä Indonesia (Jakarta)	GD Tempo LT 19, JI HR Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 15135	Sales and marketing, project management of energy products and solutions.
PT. Wärtsilä Indonesia (Jakarta)	Jl. H.R. Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 12940	Project management, sales and marketing, administration, installation and construction, commissioning of energy products and solutions.
PT. Wärtsilä Indonesia (Jakarta)	Pergudangan Cardig Cargo Group, Jakarta, Indonesia, 13610	Sales and marketing of energy products and solutions.
Wartsila Azerbaijan LLC	Nobel Avenue, AZ1026, Baku, Azerbaijan	Sales and marketing of energy products and solutions.
Wartsila Bangladesh Ltd	SMC Tower (3rd Floor), 33 Banani C/A, Dhaka, Bangladesh, 1213	Administration, sales and marketing of energy products and solutions.
Wartsila Brasil Ltda	Rua Alfândega, 33, 20070-000, Rio De Janeiro, Brazil	Administration, sales and marketing, project management, logistics, installation and construction, commissioning of energy products and solutions.
Wartsila Caribbean, Inc.	PO Box 7039, Carolina, 00987, Puerto Rico	Sales and marketing of energy products and solutions.
Wartsila Ecuador S.A.	La Mancha Business Center, 17050, Quito, Ecuador	Sales and marketing of energy products and solutions.
Wartsila Gulf FZE	Dubai Investment Park, Plot 597-572, 61494, Dubai, United Arab Emirates	Solution and product development, administration, project management, sales and marketing, support functions of energy products and solutions.
Wartsila Muscat LLC	PO Box 212, Bukha, 812, Musandam, Nigeria	Administration, installation and construction of energy products and solutions.
Wartsila Power Contractin	805B, Bin Homran Center, Jeddah, Saudi Arabia, 23432	Sales and marketing, project management, logistics, administration and support functions of energy products and solutions.
Wärtsilä Argentina S.A.	Tronador 963, 1427, Capital Federal, Argentina	Sales and marketing, project management, administration of energy products and solutions.
Wärtsilä Australia Pty Ltd	48 Huntingwood Drive, Huntingwood, 2148, Australia	Administration, sales and marketing of energy products and solutions.

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Wärtsilä Canada Inc.	1771 Savage Road, Richmond, V6V 1R1, Canada	Installation and construction of energy products and solutions.	
Wärtsilä Danmark A/S	Kystvejen 100, 9400, Nørresundby, Denmark	Sales and marketing of energy products and solutions.	
Wärtsilä Deutschland GmbH	Schlenzigstr. 6, 21107 Hamburg, Germany	Sales and marketing of energy products and solutions.	
Wärtsilä Eastern Africa	ABC Towers, 7A, Nairobi, Kenya, 00800	Sales and marketing of energy products and solutions.	
Wärtsilä Finland Oy (Helsinki)	John Stenbergin ranta 2, 00530 Helsinki, Finland	Solution and product development, sales and marketing, administration, project management, sourcing, procurement, support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Kruunantie)	Kruunantie 36, rakennus HTV1, 65230 Vaasa, Finland	Sales and marketing of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Opistokatu)	Opistokatu 7, 65100 Vaasa, Finland	Engineering, solution and product development of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Puotikuja)	Puotikuja 1, 65380 Vaasa, Finland	Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Tarhaajantie)	Tarhaajantie 2, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Yrittäjänkatu)	Yrittäjänkatu, 65380 Vaasa, Finland	Administration, sales and marketing of energy products and solutions.	
Wärtsilä France S.A.S (Mulhouse cedex)	100 Quai d'Alger - CS 91210, 68054, Mulhouse cedex, France	Project management of energy products and solutions.	
Wärtsilä France S.A.S. (Marseille)	Enceinte Portuaire, porte 4, Site CIMM, 13344, Marseille, France	Sales and marketing of energy products and solutions.	
Wärtsilä France S.A.S. (Paris La Defence)	76 route de la Demi Lune, 92057, Paris La Defense, France	Solution and product development. Sales and marketing, administration, project management of energy products and solutions.	
Wärtsilä India Private Limited (Chennai)	Shreyas Vriddhi, Chennai - 600032, India	Sales and marketing, engineering, project management, installation and construction, commissioning of energy products and solutions.	
Wärtsilä India Private Limited (Noida)	B-37, Tower - A, First Floor, Sector - 1, Noida - 201301, India	Solution and product development, sales and marketing, engineering, sourcing, logistics, comissioning, installation and construction of energy products and solutions.	

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Wärtsilä India Private Limited (Sanpada, Navi Mumbai)	Kesar Solitaire, Plot no. 5, 21st floor, Sector -19, Palm Beach road, Sanpada, Navi Mumbai - 400705, India	Sales and marketing, engineering, project management, installation and construction, commissioning, logistics, support functions of energy products and solutions.
Wärtsilä India Private Limited (Sardar Patel Road)	D.No.1-8-271, Flat No.109, 1st Floor, Sardar Patel Road - 500003, India	Administration, commissioning, sales and marketing, engineering of energy products and solutions.
Wärtsilä India Private Limited (Shilpata, Navi Mumbai)	Opp. Govt. Rest House, Shilpata, Navi Mumbai - 410203, India	Sales and marketing, project management, installation and construction, commissioning, support functions of energy products and solutions.
Wärtsilä India Private Limited (Urwa Stores)	Third Floor - Aura, Urwa Stores - 575006, India	Engineering, project management of energy products and solutions.
Wärtsilä Italia S.p.A (Milano)	Piazza Duca D'Aosta, 8 - 20124 Milano - Italy	Sales and marketing, administration of energy products and solutions.
Wärtsilä Italia S.p.A (San Dorligo Della Valle)	Bagnoli della Rosandra 334 - 34018 San Dorligo Della Valle - Italy	Administration, sourcing, logistics of energy products and solutions.
Wärtsilä Japan Ltd	6500045 - Kobe 6-7-2 Minatojima	Sales and marketing of energy products and solutions.
Wärtsilä M&P Nigeria	Oba Akinjobi Way, 000000, Lagos, Nigeria	Sales and marketing of energy products and solutions.
Wärtsilä Netherlands B.V.	Hanzelaan 95, 8017 JE, Zwolle, Netherlands	Administration, sales and marketing, support functionsof energy products and solutions.
Wärtsilä North America Inc. (Annapolis)	900 Bestgate Road, Annapolis, 21401, USA	Solution and product development, sales and marketing, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	16330 Air Center Blvd, Houston, 77032, USA	Solution and product development, sales and marketing, project management, installation and construction, commissioning, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	11710 N Gessner Rd, Houston, 77040, USA	Sales and marketing, project management, sourcing, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Long Beach)	2140 Technology Place, Long Beach, 90810, USA	Commissioning of energy products and solutions.
Wärtsilä North America Inc. (Mountlake Terrace)	6306 215th St SW Ste 3, Mountlake Terrace, 98043, USA	Sales and marketing of energy products and solutions.
Wärtsilä North America Inc. (Roxborough)	10577 Wildhorse LN, Roxborough, 80125, USA	Sales and marketing of energy products and solutions.
Wärtsilä Oyj Abp	Puotikuja 1, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.

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Wärtsilä Pakistan (Pvt.)	16 Km Raiwind Road, Lahore, 54000, Pakistan	Sales and marketing, Project management, installation and construction, commissioning, administration of energy products and solutions.
Wärtsilä Peru S.A.C.	irtsilä Peru S.A.C. Av. Ricardo Palma, Lima, Peru, L18	
Wärtsilä Philippines Inc	No. 6, Diode Street, 4025, Cabuyao, Philippines	Sales and marketing of energy products and solutions.
Wärtsilä Polska Sp. z.oo	Kubickiego 13, 02-954 Warszawa, Poland	Sales and marketing of energy products and solutions.
Wärtsilä Projects Oy (Turku)	Stålarminkatu 45, 20810 Turku, Finland	Project management, sourcing, procurement, logistics, installation and construction, commissioning of energy products and solutions.
Wärtsilä Projects Oy (Vaasa)	Puotikuja 1, 65380 Vaasa, Finland	Sales and marketing, project management, sourcing, procurement, logistics, installation and construction, commissioning, warranty and support functions of of energy products and solutions.
Wärtsilä Shanghai Service	Room 1125A, Tower B of Nanxincang Busine, Beijing, China, 100007	Sales and marketing, administration of energy products and solutions.
Wärtsilä Singapore Pte Ltd (Singapore)	11 Pandan Crescent, Singapore, Singapore, 128467	Sales and marketing, support functions, administration of energy products and solutions.
Wärtsilä Singapore Pte Ltd (Singapore)	14 Benoi Crescent, Singapore, Singapore, 128467	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Cape Town)	Dorsetshire Street, Cape Town, South Africa, 7405	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Johannesburg)	West Tower, Nelson Mandela Square, Johannesburg, South Africa, 2146	Sales and marketing of energy products and solutions.
Wärtsilä Sweden AB	Götaverksgatan 10, 402 77, Göteborg, Sweden	Sales and marketing of energy products and solutions.
Wärtsilä UK Ltd.	Wärtsilä UK Ltd., 4 Marples Way, Hants, PO9 1NX, United Kingdom	Installation and construction of energy products and solutions.
Wärtsilä Vostok LLC (Moscow)	4th Dobryninsky lane, 8, office E02-300, Moscow, Russian Federation, 119049	Project management, sales and marketing of energy products and solutions.
Wärtsilä Vostok LLC (Saint Petersburg)	Petrogradskaya emb, 36A, Saint-Petersburg, Russian Federation, 197101	Sales and marketing of energy products and solutions.
Wärtsilä-Enpa A.S.	Aydýntepe Mah. E5 karayolu üzeri - 34947 Istanbul - Turkey	Sales and marketing of energy products and solutions.

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MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 248443-2017-AHSO-FIN-FINAS Initial certification date: 25 October 2017 Valid: 25 October 2017 - 25 October 2020

This is to certify that the management system of

Wärtsilä Energy Solutions

Wärtsilä Finland Oy Puotikuja 1, 65380 Vaasa, Finland and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Occupational Health and Safety Management System standard:

OHSAS 18001:2007

This certificate is valid for the following scope:

Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.

Place and date: Espoo, 25 October 2017





For the issuing office: DNV GL Business Assurance Finland Oy Ab

Kimmo Haarala Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid. ACCREDITED UNIT: DNV GL BUSINESS ASSURANCE FINLAND OY AB, Keilasatama 5, 02150 Espoo, Finland. TEL:+358 10 292 4200. assurance.dnvgl.com

Appendix to Certificate

Wärtsilä Energy Solutions Wärtsilä Finland Oy

Locations included in the certification are as follows:

Site Name	Site Address	Site Scope	
PT. Wärtsilä Indonesia (Jakarta)	GD Tempo LT 19, JI HR Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 15135	Sales and marketing, project management of energy products and solutions.	
PT. Wärtsilä Indonesia (Jakarta)	Jl. H.R. Rasuna Said Kav 3 - 4, Jakarta, Indonesia, 12940	Project management, sales and marketing, administration, installation and construction, commissioning of energy products and solutions.	
PT. Wärtsilä Indonesia (Jakarta)	Pergudangan Cardig Cargo Group, Jakarta, Indonesia, 13610	Sales and marketing of energy products and solutions.	
Wartsila Azerbaijan LLC	Nobel Avenue, AZ1026, Baku, Azerbaijan	Sales and marketing of energy products and solutions.	
Wartsila Bangladesh Ltd	SMC Tower (3rd Floor), 33 Banani C/A, Dhaka, Bangladesh, 1213	Administration, sales and marketing of energy products and solutions.	
Wartsila Brasil Ltda	Rua Alfândega, 33, 20070-000, Rio De Janeiro, Brazil	Administration, sales and marketing, project management, logistics, installation and construction, commissioning of energy products and solutions.	
Wartsila Caribbean, Inc.	PO Box 7039, Carolina, 00987, Puerto Rico	Sales and marketing of energy products and solutions.	
Wartsila Ecuador S.A.	La Mancha Business Center, 17050, Quito, Ecuador	Sales and marketing of energy products and solutions.	
Wartsila Gulf FZE	Dubai Investment Park, Plot 597-572, 61494, Dubai, United Arab Emirates	Solution and product development, administration, project management, sales and marketing, support functions of energy products and solutions.	
Wartsila Muscat LLC	PO Box 212, Bukha, 812, Musandam, Nigeria	Administration, installation and construction of energy products and solutions.	
Wartsila Power Contractin	805B, Bin Homran Center, Jeddah, Saudi Arabia, 23432	Sales and marketing, project management, logistics, administration and support functions of energy products and solutions.	
Wärtsilä Argentina S.A.	Tronador 963, 1427, Capital Federal, Argentina	Sales and marketing, project management, administration of energy products and solutions.	
Wärtsilä Australia Pty Ltd	48 Huntingwood Drive, Huntingwood, 2148, Australia	Administration, sales and marketing of energy products and solutions.	

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Wärtsilä Canada Inc.	1771 Savage Road, Richmond, V6V 1R1, Canada	Installation and construction of energy products and solutions.	
Wärtsilä Danmark A/S	Kystvejen 100, 9400, Nørresundby, Denmark	, Sales and marketing of energy products and solutions.	
Wärtsilä Deutschland GmbH	Schlenzigstr. 6, 21107 Hamburg, Germany	Sales and marketing of energy products and solutions.	
Wärtsilä Eastern Africa	ABC Towers, 7A, Nairobi, Kenya, 00800	Sales and marketing of energy products and solutions.	
Wärtsilä Finland Oy (Helsinki)	John Stenbergin ranta 2, 00530 Helsinki, Finland	Solution and product development, sales and marketing, administration, project management, sourcing, procurement, support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Kruunantie)	Kruunantie 36, rakennus HTV1, 65230 Vaasa, Finland	Sales and marketing of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Opistokatu)	Opistokatu 7, 65100 Vaasa, Finland	Engineering, solution and product development of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Puotikuja)	Puotikuja 1, 65380 Vaasa, Finland	Solution and product development and delivery, marketing, sales, engineering, project management, sourcing, procurement, logistics, installation, construction, commissioning, warranty and support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Tarhaajantie)	Tarhaajantie 2, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.	
Wärtsilä Finland Oy (Vaasa, Yrittäjänkatu)	Yrittäjänkatu, 65380 Vaasa, Finland	Administration, sales and marketing of energy products and solutions.	
Wärtsilä France S.A.S (Mulhouse cedex)	100 Quai d'Alger - CS 91210, 68054, Mulhouse cedex, France	Project management of energy products and solutions.	
Wärtsilä France S.A.S. (Marseille)	Enceinte Portuaire, porte 4, Site CIMM, 13344, Marseille, France	Sales and marketing of energy products and solutions.	
Wärtsilä France S.A.S. (Paris La Defence)	76 route de la Demi Lune, 92057, Paris La Defense, France	Solution and product development. Sales and marketing, administration, project management of energy products and solutions.	
Wärtsilä India Private Limited (Chennai)	Shreyas Vriddhi, Chennai - 600032, India	Sales and marketing, engineering, project management, installation and construction, commissioning of energy products and solutions.	
Wärtsilä India Private Limited (Noida)	B-37, Tower - A, First Floor, Sector - 1, Noida - 201301, India	Solution and product development, sales and marketing, engineering, sourcing, logistics, comissioning, installation and construction of energy products and solutions.	

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Wärtsilä India Private Limited (Sanpada, Navi Mumbai)	Kesar Solitaire, Plot no. 5, 21st floor, Sector -19, Palm Beach road, Sanpada, Navi Mumbai - 400705, India	Sales and marketing, engineering, project management, installation and construction, commissioning, logistics, support functions of energy products and solutions.
Wärtsilä India Private Limited (Sardar Patel Road)	D.No.1-8-271, Flat No.109, 1st Floor, Sardar Patel Road - 500003, India	Administration, commissioning, sales and marketing, engineering of energy products and solutions.
Wärtsilä India Private Limited (Shilpata, Navi Mumbai)	Opp. Govt. Rest House, Shilpata, Navi Mumbai - 410203, India	Sales and marketing, project management, installation and construction, commissioning, support functions of energy products and solutions.
Wärtsilä India Private Limited (Urwa Stores)	Third Floor - Aura, Urwa Stores - 575006, India	Engineering, project management of energy products and solutions.
Wärtsilä Italia S.p.A (Milano)	Piazza Duca D'Aosta, 8 - 20124 Milano - Italy	Sales and marketing, administration of energy products and solutions.
Wärtsilä Italia S.p.A (San Dorligo Della Valle)	Bagnoli della Rosandra 334 - 34018 San Dorligo Della Valle - Italy	Administration, sourcing, logistics of energy products and solutions.
Wärtsilä Japan Ltd	6500045 - Kobe 6-7-2 Minatojima	Sales and marketing of energy products and solutions.
Wärtsilä M&P Nigeria	Oba Akinjobi Way, 000000, Lagos, Nigeria	Sales and marketing of energy products and solutions.
Wärtsilä Netherlands B.V.	Hanzelaan 95, 8017 JE, Zwolle, Netherlands	Administration, sales and marketing, support functionsof energy products and solutions.
Wärtsilä North America Inc. (Annapolis)	900 Bestgate Road, Annapolis, 21401, USA	Solution and product development, sales and marketing, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	16330 Air Center Blvd, Houston, 77032, USA	Solution and product development, sales and marketing, project management, installation and construction, commissioning, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Houston)	11710 N Gessner Rd, Houston, 77040, USA	Sales and marketing, project management, sourcing, support functions, administration of energy products and solutions.
Wärtsilä North America Inc. (Long Beach)	2140 Technology Place, Long Beach, 90810, USA	Commissioning of energy products and solutions.
Wärtsilä North America Inc. (Mountlake Terrace)	6306 215th St SW Ste 3, Mountlake Terrace, 98043, USA	Sales and marketing of energy products and solutions.
Wärtsilä North America Inc. (Roxborough)	10577 Wildhorse LN, Roxborough, 80125, USA	Sales and marketing of energy products and solutions.
Wärtsilä Oyj Abp	Puotikuja 1, 65380 Vaasa, Finland	Administration and support functions of energy products and solutions.

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Wärtsilä Pakistan (Pvt.)	16 Km Raiwind Road, Lahore, 54000, Pakistan	Sales and marketing, Project management, installation and construction, commissioning, administration of energy products and solutions.
Wärtsilä Peru S.A.C.	Av. Ricardo Palma, Lima, Peru, L18	Sales and marketing of energy products and solutions.
Wärtsilä Philippines Inc	No. 6, Diode Street, 4025, Cabuyao, Philippines	Sales and marketing of energy products and solutions.
Wärtsilä Polska Sp. z.oo	Kubickiego 13, 02-954 Warszawa, Poland	Sales and marketing of energy products and solutions.
Wärtsilä Projects Oy (Turku)	Stålarminkatu 45, 20810 Turku, Finland	Project management, sourcing, procurement, logistics, installation and construction, commissioning of energy products and solutions.
Wärtsilä Projects Oy (Vaasa)	Puotikuja 1, 65380 Vaasa, Finland	Sales and marketing, project management, sourcing, procurement, logistics, installation and construction, commissioning, warranty and support functions of of energy products and solutions.
Wärtsilä Shanghai Service	Room 1125A, Tower B of Nanxincang Busine, Beijing, China, 100007	Sales and marketing, administration of energy products and solutions.
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Wärtsilä Singapore Pte Ltd (Singapore)	14 Benoi Crescent, Singapore, Singapore, 128467	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Cape Town)	Dorsetshire Street, Cape Town, South Africa, 7405	Sales and marketing of energy products and solutions.
Wärtsilä South Africa (Pty) (Johannesburg)	West Tower, Nelson Mandela Square, Johannesburg, South Africa, 2146	Sales and marketing of energy products and solutions.
Wärtsilä Sweden AB	Götaverksgatan 10, 402 77, Göteborg, Sweden	Sales and marketing of energy products and solutions.
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Wärtsilä Vostok LLC (Moscow)	4th Dobryninsky lane, 8, office E02-300, Moscow, Russian Federation, 119049	Project management, sales and marketing of energy products and solutions.
Wärtsilä Vostok LLC (Saint Petersburg)	Petrogradskaya emb, 36A, Saint-Petersburg, Russian Federation, 197101	Sales and marketing of energy products and solutions.
Wärtsilä-Enpa A.S.	Aydýntepe Mah. E5 karayolu üzeri - 34947 Istanbul - Turkey	Sales and marketing of energy products and solutions.

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Part IV Proposal Security Letter of Guarantee from Bank



ELECTRIC POWER GENERATION ENTERPRISE MINISTRY OF ELECTRICITY AND ENERGY OFFICE 27, NAY PYI TAW

Date. - 5 MAR 2018

BID SECURITY NO. 60824 / G / 2017 - 2018 (P) FOR USD 840,000/-

WE HAVE BEEN INFORMED THAT NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD (MYANMAR CHEMICAL & MACHINERY CO., LTD) (HEREINAFTER CALLED 'THE APPLICANT') HAS SUBMITTED OR WILL SUBMIT TO THE BENEFICIARY ITS BID TO YOU ITS SECTION (II) BID DATA SHEET ITB 19.1 (HEREINAFTER CALLED 'THE BID') FOR THE EXECUTION OF SUBSTATION GAS ENGINE UNDER INVITATION FOR TINDER NO. 31/EPGE/G-02/2017-2018 ('THE IFB').

FURTHERMORE, WE UNDERSTAND THAT, ACCORDING TO THE BENEFICIARY'S CONDITIONS, BIDS MUST BE SUPPORTED BY A BID GUARANTEE. AT THE REQUEST OF THE APPLICANT, WE MYANMAR FOREIGN TRADE BANK HEREBY IRREVOCABLY UNDERTAKE TO PAY THE BENEFICIARY ANY SUM OR SUMS NOT EXCEEDING IN TOTAL AN AMOUNT OF USD 840,000/- (UNITED STATE DOLLAR EIGHT HUNDRED FORTY THOUSAND ONLY) UPON RECEIPT BY US OF THE BENEFICIAR'S COMPLYING DEMAND, SUPPORTED BY THE BENEFICIARY'S STATEMENT, WHETHER IN THE DEMAND ITSELF OR A SEPARATE SIGNED DOCUMENT ACCOMPANYING OR IDENTIFYING THE DEMAND, STAING THAT EITHER THE APPLICANT:

- (A) HAS WITHDRAWN ITS BID DURING THE PERIOD OF BID VALIDITY SET FORTH IN THE APPLICANT'S LETTER OF BID ("THE BID VALIDITY PERIOD"), OR ANY EXTENSION THERETO PROVIDED BY THE APPLICANT; OR
- (B) HAVING BEEN NOTIFIED OF THE ACCEPTANCE OF ITS BID BY THE BENEFICIARY DURING THE BID VALIDITY PERIOD OR ANY EXTENSION THERETO PROVIDED BY THE APPLICANT, (I) HAS FAILED TO EXECUTE THE CONTRACT AGREEMENT, OR (II) HAS FAILED TO FURNISH THE PERFORMANCE SECURITY, IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS ("ITB") OF THE BENEFICIARY'S BIDDING DOCUMENT.

THIS GUARANTEE WILL EXPIRE (A) IF THE APPLICANT IS THE SUCCESSFUL BIDDER, UPON OUR RECEIPT OF COPIES OF THE CONTRACT AGREEMENT SIGNED BY THE APPLICANT AND THE PERFORMANCE SECURITY ISSUED TO THE BENEFICIAY IN RELATION TO SUCH CONTRACT AGREEMENT; OR (B) IF THE APPLICANT IS NOT THE SUCCESSFUL BIDDER, UPON THE EARLIER OF (I) OUR RECIPT OF A COPY OF THE BENEFICIARY'S NOTIFICATION TO THE APPLICANT OF THE RESULTS OF THE BIDDING PROCESS, OR (II) TWENTY- EIGHT (28) DAYS AFTER THE END OF THE BID VALIDITY PEROD.

CONSEQUENTLY, ANY DEMAND FOR PAYMENT UNDER THIS GUARANTEE MUST BE RECEIVED BY US AT THE OFFICE ABOVE ON OR BEFORE THAT DATE. (05-10-2018).

THIS GUARANTEE IS SUBJECT TO THE UNIFORM RULES FOR DEMAND GUARANTEES (URDG) 2010 REVISION, ICC PUBLICATION NO. 758.

THIS GUARANTEE MUST BE RETURNED TO US FOR CANCELLATION AS SOON AS ITS EXPIRE.

YOURS FAITHFULLY, FOR MYANMA FOREIGN TRADE BANK

COUNTERSIGNED

MANAGER FINANCING & GUARANTEE DEPT;

ASSISTANT MANAGER GUARANTEE DEPT;



ELECTRIC POWER GENERATION ENTERPRISE MINISTRY OF ELECTRICITY AND ENERGY NAY PYI TAW

Date. 2 0 FEB 2018

BID SECURITY NO. 60674 / G / 2017 - 2018 (P) FOR USD 560,000/-

WE HAVE BEEN INFORMED THAT MYANMAR CHEMICAL & MACHINERY CO., LTD (HEREINAFTER CALLED 'THE APPLICANT') HAS SUBMITTED OR WILL SUBMIT TO THE BENEFICIARY ITS BID TO YOU ITS SECTION (II) BID DATA SHEET ITB 19.1 (HEREINAFTER CALLED 'THE BID') FOR THE EXECUTION OF SUBSTATION EQUIPMENTS UNDER INVITATION FOR TENDER NO 31/EPGE/G-02/2017-2018 ('THE IFB').

FURTHERMORE, WE UNDERSTAND THAT, ACCORDING TO THE BENEFICIARY'S CONDITIONS, BIDS MUST BE SUPPORTED BY A BID GUARANTEE. AT THE REQUEST OF THE APPLICANT, WE MYANMAR FOREIGN TRADE BANK HEREBY IRREVOCABLY UNDERTAKE TO PAY THE BENEFICIARY ANY SUM OR SUMS NOT EXCEEDING IN TOTAL AN AMOUNT OF USD 560,000/- (UNITED STATE DOLLAR FIVE HUNDRED SIXTY THOUSAND ONLY) UPON RECEIPT BY US OF THE BENEFICIAR'S COMPLYING DEMAND, SUPPORTED BY THE BENEFICIARY'S STATEMENT, WHETHER IN THE DEMAND ITSELF OR A SEPARATE SIGNED DOCUMENT ACCOMPANYING OR IDENTIFYING THE DEMAND, STAING THAT EITHER THE APPLICANT:

- (A) HAS WITHDRAWN ITS BID DURING THE PERIOD OF BID VALIDITY SET FORTH IN THE APPLICANT'S LETTER OF BID ("THE BID VALIDITY PERIOD"), OR ANY EXTENSION THERETO PROVIDED BY THE APPLICANT, OR
- (B) HAVING BEEN NOTIFIED OF THE ACCEPTANCE OF ITS BID BY THE BENEFICIARY DURING THE BID VALIDITY PERIOD OR ANY EXTENSION THERETO PROVIDED BY THE APPLICANT, (I) HAS FAILED TO EXECUTE THE CONTRACT AGREEMENT, OR (II) HAS FAILED TO FURNISH THE PERFORMANCE SECURITY, IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS ("ITB") OF THE BENEFICIARY'S BIDDING DOCUMENT.

THIS GUARANTEE WILL EXPIRE (A) IF THE APPLICANT IS THE SUCCESSFUL BIDDER, UPON OUR RECEIPT OF COPIES OF THE CONTRACT AGREEMENT SIGNED BY THE APPLICANT AND THE PERFORMANCE SECURITY ISSUED TO THE BENEFICIAY IN RELATION TO SUCH CONTRACT AGREEMENT; OR (B) IF THE APPLICANT IS NOT THE SUCCESSFUL BIDDER, UPON THE EARLIER OF (I) OUR RECIPT OF A COPY OF THE BENEFICIARY'S NOTIFICATION TO THE APPLICANT OF THE RESULTS OF THE BIDDING PROCESS, OR (II) TWENTY- EIGHT (28) DAYS AFTER THE END OF THE BID VALIDITY PEROD.

CONSEQUENTLY, ANY DEMAND FOR PAYMENT UNDER THIS GUARANTEE MUST BE RECEIVED BY US AT THE OFFICE ABOVE ON OR BEFORE THAT DATE. (18-9-2018).

THIS GUARANTEE IS SUBJECT TO THE UNIFORM RULES FOR DEMAND GUARANTEES (URDG) 2010 REVISION, ICC PUBLICATION NO. 758.

THIS GUARANTEE MUST BE RETURNED TO US FOR CANCELLATION AS SOON AS ITS EXPIRE.

YOURS FAITHFULLY, FOR MYANMA FOREIGN TRADE BANK

COUNTERSIGNED



ASSISTANT MANAGER GUARANTEE DEPT;

MANAGER FINANCING & GUARANTEE DEPT;

Commercial Proposal for Rental Power

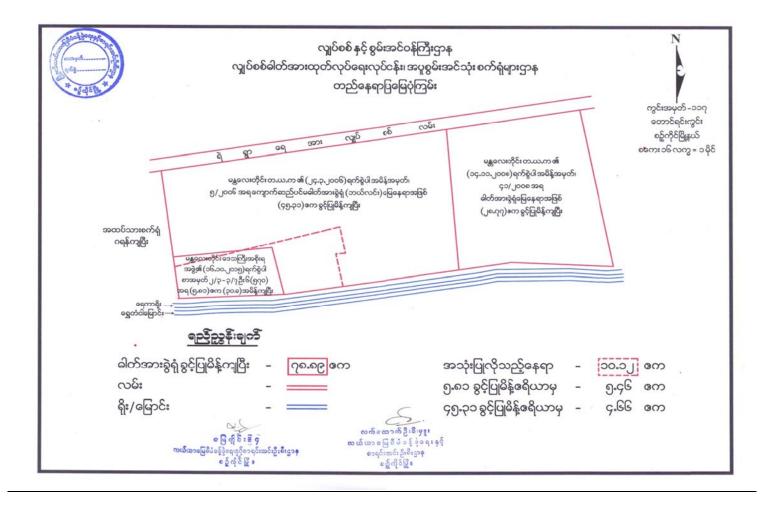
S.No.	Company Name	Load (%)	Proposed	i Price (2 decimals)	Rental Period	Remark
1	NIHC	50%		US cents / kWh	26 L H	
2	Consortium 100%	3.10	US cents / kWh	50 months	_	

- Custom duties payable in Myanmar shall be included in proposed Tariff.
- All kinds of applicable tax in Myanmar during operation and construction other than custom duties shall be excluded in the tariff for evaluation purpose.
- The successful bidder shall pay all kind of applicable tax including not limited to such as import duties, custom duties, commercial tax, withholding tax, etc. during construction and operation period.
- EPGE shall not pay any kind of applicable tax.

Signature: X

Authorized Person:Maung Kyay Managing Director National Infrastructure Holdings Company

LOCATION MAP FOR 145.49 MW KYAUKSE GAS ENGINES POWER PLANT PROJECT



Coordinate Point

Fence boundary outcomes (WGS84 coordinate system) provided by the MPGE Fence boundary outcomes (myanmar coordinate system) provided by the EPGE

 A
 206385.547
 2398859.605
 85.64

 B
 205405.967
 2398791.739
 84.84

 B-1205427.013
 2398721.113
 81.51

 C
 206368.676
 2398778.484
 84.44

 D
 205390.522
 2398712.886
 83.73

 E
 206202.852
 2398670.576
 84.19

 F
 206065.212
 2398664.633
 85.00

 G
 206006.965
 2398735.436
 85.51

 TP01
 204995.661
 2398961.748
 87.51

 TP02
 205049.922
 2398741.543
 85.09

96:9:11. 560015, 21:40:7. 260007	85.64
96:9:12. 306304, 21:40:5. 070930	64. 84
96:9:13.085956, 21:40:2.784032	81. 51
96:9:11.026329, 21:40:4.615927	84.44
96:9:11.826338,21:40:2.495922	83. 73
96:9:5. 330012, 21:40:1. 010029	84. 19
96:8:59. 160328, 21:40:0. 710935	85.00
96:8:58. 480624, 21:40:3. 000079	85, 51
96:8:57.946621,21:40:10.018921	87.51
96:8:59.945360,21:40:3.279625	85. 09
	96:9:12.306304,21:40:5.070930 96:9:13.066956,21:40:2.784032 96:9:11.026329,21:40:4.615927 96:9:11.826338,21:40:2.495922 96:9:5.330012,21:40:1.010029

Fence boundary outcomes (WSS84 coordinate system) adjusted fence range

A* 96:9:11.553347,21:40:7.258008	85.64
B' 96:9:12. 302536, 21:40:5. 066350	84. 64
B-1' 98:9:13. 107021, 21:40:2. 686391	81.61
C' 96:9:11.026329, 21:40:4.615927	84.44
p' 96:9:11.840483, 21:40:2.409175	83.73
E 96:9:5. 320719, 21:40:1. 079741	84.19
F 96:8:59. 159243, 21:40:0. 723682	85.00
G' 96:8:58.636968, 21:40:3.033625	85.51
TP01 96:8:57.946621,21:40:10,018921	87.51
TP02 96:8:59.945360, 21:40:3.279625	85.09

Fence	boundary	outcomes	(<u>. 1</u>	coordinate	system)
		adjusted	fence r	ange	

A' 205385, 547	2396859.605	85, 64
B [*] 205405.867	2398791, 739	84, 84
B-1'206427. 672	2398718.047	81. 51
C 205368, 675	2398778, 484	84, 44
D' 205391, 069	2398710, 182	63, 73
B [*] 205202, 702	2398672.701	84. 19
F 205025, 195	2398664, 998	65.00
6' 205011.473	2398738. 386	85. 51
TP01 204995.661	2398951.748	87.51
TF02 205049.922	2398741. 543	85.09



Task Name														
	Duration Start	Finish												
			18 Apr	18 May	18 Jun	18 Jul	18 Aug	18 Sep	18 Oct	18 Nov	18 Dec	19 Jan	19 Feb	19 M
Overall Constructon Sche	* * * *	2019/2/16		F /7										
Letter of Accetance Issue (2018/5/7		♦ 5/7										
Preliminaries	42 days 2018/5/2													
Mobilization	7 days 2018/5/21													
	ographical survey 15 days 2018/5/30													
Site Preparation	30 days 2018/5/30													
	porary structure 33 days 2018/5/30													
Design & Engineeering	96 days 2018/5/7			•										
Overall plot plan	20 days 2018/5/7	2018/5/26												
Design basic report	50 days 2018/5/7	2018/6/25												
Engine/Gen Sets Design	• • • •													
Electrical Design	96 days 2018/5/7			•										
Electrical load list	70 days 2018/5/7	2018/7/15												
SLD's	70 days 2018/5/7	2018/7/15												
HV/MV system	86 days 2018/5/7	2018/7/31					l							
LV system	86 days 2018/5/7	2018/7/31					l							
DC system	86 days 2018/5/7	2018/7/31					l							
Protection Block Diag	• • •	2018/7/31					l i							
Electrical layouts	86 days 2018/5/7	2018/7/31					l -							
Issue all elctrical desi														
I & C Desing	75 days 2018/5/7			•										
Measurement list	75 days 2018/5/7	2018/7/20												
Instrument list	75 days 2018/5/7	2018/7/20												
Instrucment loop dia		2018/7/20												
Instrument Engg data	sheets 75 days 2018/5/7	2018/7/20												
Cable block diagrams	75 days 2018/5/7	2018/7/20												
Summary of instrucm	ent cables 75 days 2018/5/7	2018/7/20												
Mechanical Design	75 days 2018/5/7	2018/7/20		•										
Fuel gas system	65 days 2018/5/7	2018/7/10												
Lube oil system	65 days 2018/5/7	2018/7/10												
Compressed air syste	m 65 days 2018/5/7	2018/7/10												
Fire fighting system	65 days 2018/5/7	2018/7/10												
HVAC system	65 days 2018/5/7	2018/7/10												
Exhaust gas system	65 days 2018/5/7	2018/7/10												
Water treatment syst	em 65 days 2018/5/7	2018/7/10												
Piping Plans	65 days 2018/5/7	2018/7/10												
Piping Isometrics	65 days 2018/5/7	2018/7/10												
Steel structure	75 days 2018/5/7	2018/7/20												
Civil Design Works	65 days 2018/5/7	2018/7/10		•										
	Task	Summary		I	nactive Milestone		Dur	ation-only						
oject: 147.768 MW Kyaukse	२ Split	Project Summary			nactive Summary			nual Summary Rol	lup					
ate: 2018/5/21	Milestone \blacklozenge	Inactive Task			lanual Task			ernal Tasks						
	1				Page 1									

								147.768	3 MW K	yaukse Re	ental Pow	ver Proj	ect						
	Task Name																		
I ID			Duration	Start	Finish														
						18 Apr		18 May	1	.8 Jun	18 Jul	I	18 Aug	18 S	ep	18 Oct		18 Nov	18 Dec
40	Site Grading, fencing ar drawings	nd access road	65 days	2018/5/7	2018/7/10				I			I			I		1		
41	Foundation design-tank	< farm	55 days	2018/5/7	2018/6/30														
42	Foundation design-gens	sets	55 days	2018/5/7	2018/6/30														
43	Foundation design-exha	aust stack	55 days	2018/5/7	2018/6/30														
44	Swithchyard foundation	าร	55 days	2018/5/7	2018/6/30														
45	Foundation design-othe	ers	60 days	2018/5/7	2018/7/5														
46	Steel buildings		60 days	2018/5/7	2018/7/5														
47	Manufacturing & shipping		176 day	2018/5/7	2018/10/29		ų										•		
48	Engine/gen sets		70 days	2018/5/7	2018/7/15														
49	Material for gas supply		30 days	2018/6/1	2018/6/30														
50	Electrical equipment		158 day	2018/5/21	2018/10/25			• • -								_	I		
51	Earthing system		30 days	2018/5/21	2018/6/19														
52	Step up transformers		120 day	2018/6/7	2018/10/4														
53	132 KV interconnection switchyardd	facility and	120 days	2018/6/22	2018/10/19														
54	Auxiliary transformers		126 day	2018/6/22	2018/10/25														
55	Medium voltage switch	gear	126 day	2018/6/22	2018/10/25														
56	LV switchgear		126 day	2018/6/22	2018/10/25														
57	DC/AC UPS system		126 day	2018/6/22	2018/10/25														
58	MV/LV cables and acces	ssories	126 day	2018/6/22	2018/10/25														
59	DCS/SCAD		126 day	2018/6/22	2018/10/25														
60	Small power, lighting an proctection	nd lightening	126 days	2018/6/22	2018/10/25														
61	Mechanical equipment		128 day	2018/5/25	2018/9/29														
62	Fuel gas system		120 day	2018/5/25	2018/9/21														
62 63	Lube oil system		120 day	2018/5/25	2018/9/21														
64 65	Compressed air system		120 day	2018/5/25	2018/9/21														
65	Fire fighting system		120 day	2018/5/25	2018/9/21														
66	HVAC system		120 day	2018/5/25	2018/9/21														
67	Exhaust gas system		120 day	2018/5/25	2018/9/21														
68	Water treatment system	m	120 day	2018/5/25	2018/9/21														
69	Steel structure		120 day	2018/6/2	2018/9/29														
70	Civil Materials		150 day	2018/6/2	2018/10/29				-										
71	Steel buidlings		150 day	2018/6/2	2018/10/29														
72	Other materials		120 day	2018/6/2	2018/9/29														
73	Civil construction		187 day	2018/5/25	2018/11/27														
74	Site leveling, grading & draw & earth work	ainage system	20 days	2018/5/25	2018/6/13			1											
75	E Foundation -Gensets		50 days	2018/7/13	2018/8/31														
\vdash																			
P	oject: 147.768 MW Kyaukse R	Task			Summary	-			Inactive	Milestone	\diamond			uration-only					
	ate: 2018/5/21	Split			Project Summary				Inactive	Summary			N	lanual Summ	ary Rollup			-	
		Milestone	•		Inactive Task				Manual	Task			E:	kternal Tasks					
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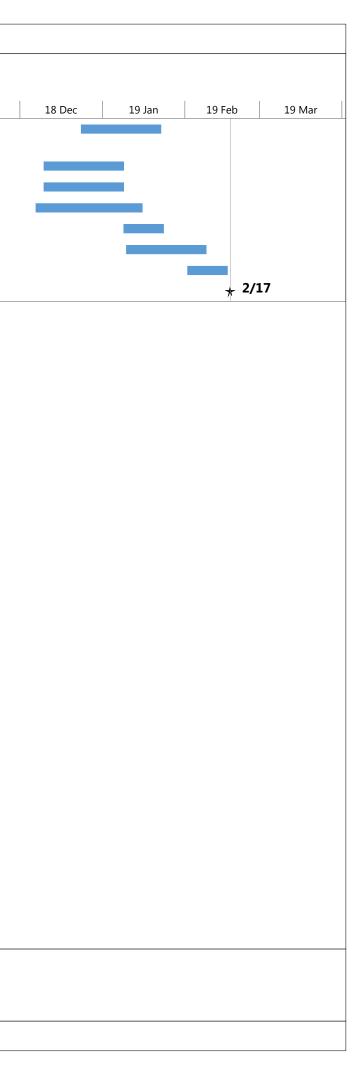
18 Dec	19 Jan	19 Feb	19 Mar
10 Dec	19 9811	19160	19 10101

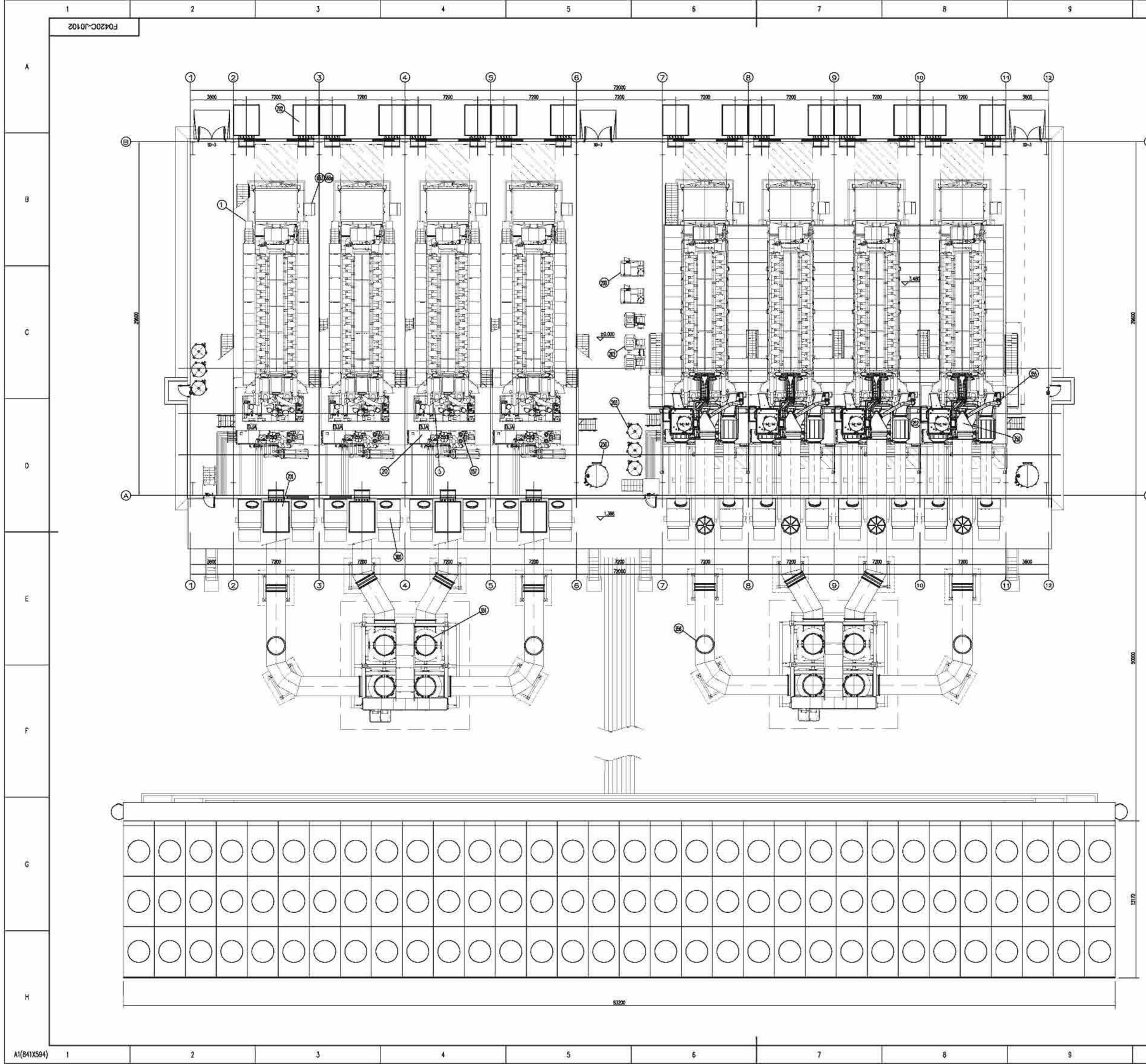
						147.76	8 MW Kyaukse Re	ntal Power F	Project			
Task Name		Duration	Start	Finish								
		Duration	Start	FILISH	18 Apr	18 May	18 Jun	18 Jul	18 Aug	18 Sep	18 Oct	18
Foundation- Exhaust stac	:k	35 days 2	2018/7/23	2018/8/26	- I ⁻							
E Foundation-building		35 days 2	2018/7/28	2018/8/31								
Switchyard foundations		35 days 2	2018/7/28	2018/8/31								
E Steel buidlings		35 days 2	2018/9/15	2018/10/19								
Underground cable tray		61 days 2	2018/6/8	2018/8/7								
E Foundation-all others		55 days 2	2018/7/18	2018/9/10								
Internal roads and draina	ige	50 days 2	2018/9/25	2018/11/13								
Fencing on polt		30 days 2	2018/10/29	2018/11/27								
Erection and commissionin	g	151 day2	2018/9/14	2019/2/11								
Electro/Mechanical erect	tion	151 day 2	2018/9/14	2019/2/11								
Geneset			2018/9/14	2018/12/12								
E Steel structure		90 days 2	2018/10/18	2019/1/15								
Fuel gas system			2018/10/28	2019/1/15								
Lube oil system		70 days 2	2018/11/7	2019/1/15								
E Compressed air system	า	59 days 2	2018/11/3	2018/12/31								
Fire fighting system		59 days 2	2018/11/3	2018/12/31								
E HVAC system		30 days 2	2018/12/2	2018/12/31								
Exhaust gas system		70 days 2	2018/9/22	2018/11/30								
Water treatment syste	em	100 day 2	2018/11/4	2019/2/11								
E Step up transformers		60 days 2	2018/11/17	2019/1/15								
132 KV interconnection switchyardd	n facility and	80 days 2	2018/10/28	2019/1/15								
Auxiliary transformers		15 days 2	2019/1/1	2019/1/15								
Medium voltage switch	hgear	56 days 2	2018/11/1	2018/12/26								
LV switchgear		50 days 2	2018/11/27	2019/1/15								
DC/AC UPS system		-	2018/12/17	2019/1/15								
DCS/SCAD		-	2018/12/17	2019/1/15								
Small power, lighting a proctection			2018/10/28	2019/1/15								
Gas supply infrastructu			2018/12/2	2018/12/31								
Pre commissioning & cor	mmissioning		2018/12/7	2019/2/8								
Geneset		-	2018/12/30	2019/1/28								
Fuel gas system			2018/12/18	2019/1/11								
Lube oil system			2019/1/21	2019/2/4								
Compressed air system	า		2019/1/1	2019/1/25								
Fire fighting system		-	2019/1/1	2019/1/28								
HVAC system		-	2019/1/1	2019/1/30								
Exhaust gas system		-	2019/1/2	2019/1/16								
Water treatment syste	em	15 days 2	2019/1/9	2019/1/23								
Project: 147.768 MW Kyaukse R	Task			Summary			Inactive Milestone	\$	Du	iration-only		
Date: 2018/5/21	Split			Project Summary	1	1	Inactive Summary		Ma	anual Summary R	ollup	
. ,	Milestone	•		Inactive Task			Manual Task		Ext	ternal Tasks		
							Page 3					



		ental Power P	roject								
ID	Task Name	Duration Start	Finish								
				18 Apr	18 May	18 Jun	18 Jul	18 Aug	18 Sep	18 Oct	18 Nov
L13	132 KV interconnection facility and switchyardd	30 days 2018/12/24	2019/1/22								
L14		30 days 2018/12/10	2019/1/8								
L15	0 0	30 days 2018/12/10	2019/1/8								
L16		40 days 2018/12/7	2019/1/15								
L17		15 days 2019/1/9	2019/1/23								
L18	DCS/SCAD	30 days 2019/1/10	2019/2/8								
L19	Start up testing and reliability run	15 days 2019/2/2	2019/2/16								
L2(Commercial Operaration Date(COD)	1 day 2019/2/17	2019/2/17								

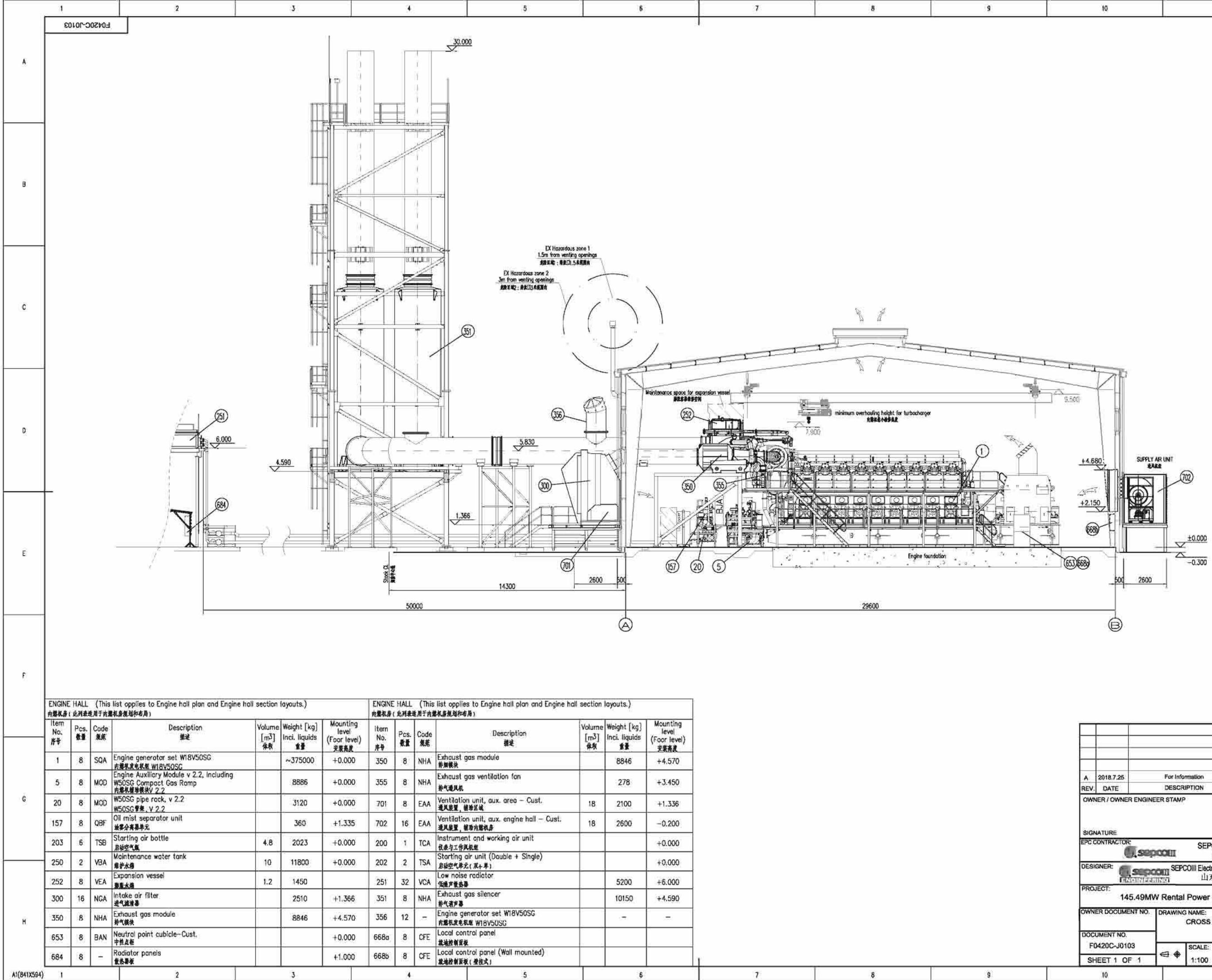
Project: 147.768 MW Kyaukse R	Task		Summary	 Inactive Milestone	\$	Duration-only
Date: 2018/5/21	Split Milestone	♦	Project Summary Inactive Task	Inactive Summary Manual Task	U U	Manual Summary Rollup External Tasks
				Page 4		





	IQ IE HALL	(This	11 i list opplies to Engine hall plan and Engine	hall sect	-	12	1
Item	17 Y 3 X2 C 44. S		離根房規划和市局) Description	Volume	Weight [kg]	Mounting level	
No. 序号	ŧ.	频苑	Description 描述	[m ⁵] 修務	Inci. liquids	(Foor level) 安装亮度],
35	8	SQA	Engine generator set W18V50SG 内農权文电权电 W18V50SG		~375000	+0.000	
5	8	MOD	Engine Auxiliary Module v 2.2, Including		8886	+0.000	
20	8	MOD	W50SG pipe rack, y 2.2 W50SG 梦年, Y 2.2		3120	+0.000	
157	8	QBF	Oil mist separator unit 始雾分音暴单元		360	+1.335	ſ
203	6	TSB	Starting air bottle 启动空气集	4.8	2023	+0.000	
250	2	VBA	Mointenance water tank 维护水箱	10	11800	+0.000	1
252	8	VEA	Exponsion vessel	1.2	1450		1
300	16	NGA	Intake air filter 进行就准备		2510	+1.366	
350	8	NHA	Exhoust gos module 养物被决		8846	+4.570	1
350	8	NHA	Exhaust gas module 発想接头		8846	+4.570	L
355	8	NHA	Exhaust gas ventilation fan #132.4		278	+3.450	1
701	8	EAA	Ventilation unit, aux. area — Cust. 通見装置、開始区域	18	2100	+1,336	1
702	16	EAA	Ventilation unit, aux. engine hall - Cust. 通見装置、健康内燃机店	18	2600	-0.200	1,
200	4	TCA	Instrument and working air unit 我表与工作某机组			+0.000] `
202	2	TSA	Starting cir unit (Double + Single) 启动空气单元(某+单)			+0.000	1
251	32	VCA	Low noise radiator 低速声量热量		5200	+6.000	
351	8	NHA	Exhoust gas silencer 非代述声易		10150	+4.590	F
356	12	12	Engine generator set W18V50SG 内裁机发电机组 W18V50SG		24	122	
653	8	BAN	Neutral point cubicle-Cust. 中性点柜			+0.000	
684	8		Radiator panels 世界皇祖	-		+1.000	1
6680	8	CFE	Loost control nano				
668b	8	CFE	Logal applied panel (Wall mounted)				

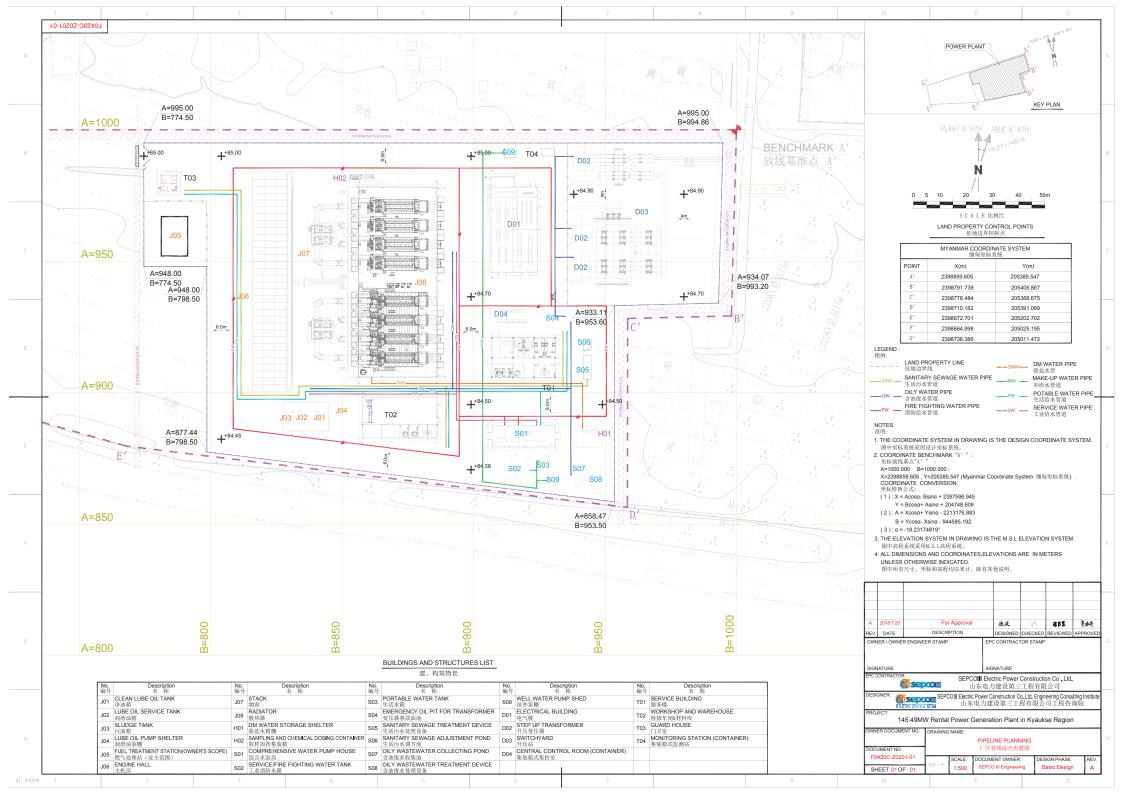
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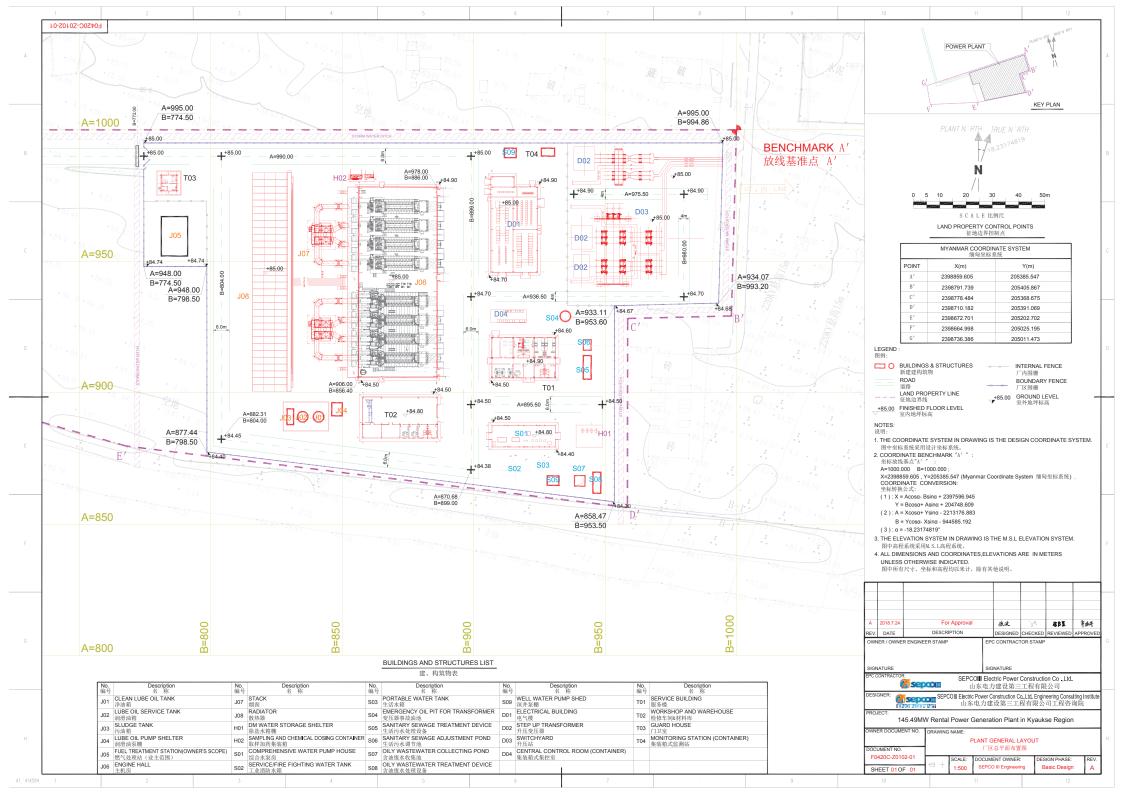


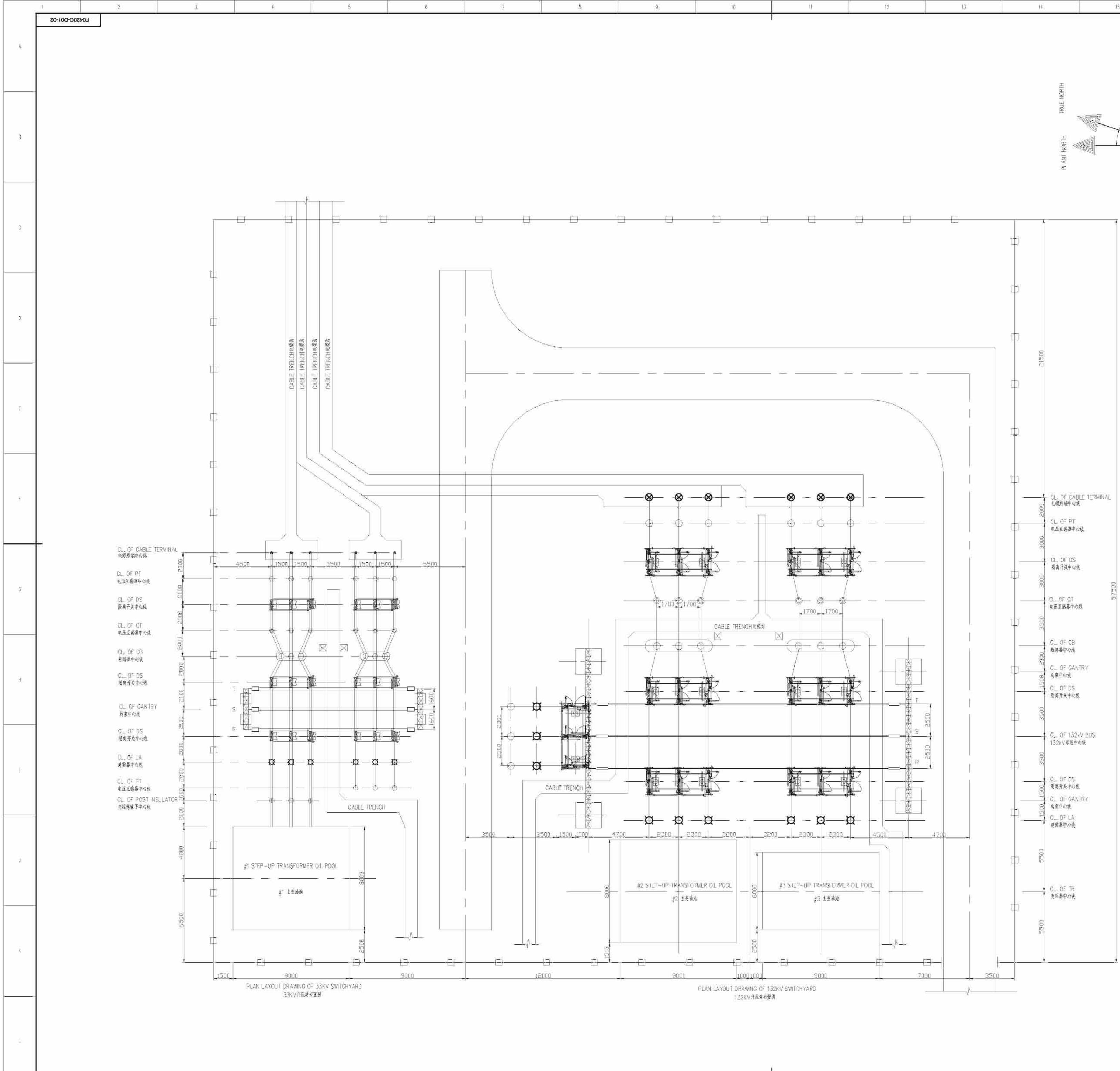
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ŧ(Volume [m ³] 体教	Weight [kg] Inci. liquids	Mounting level (Foor level) 安装高度
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		278	+3.450
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nall – Cust.	18	2600	-0.200
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ngle)			+0.000
		5200	+6.000
		10150	+4.590
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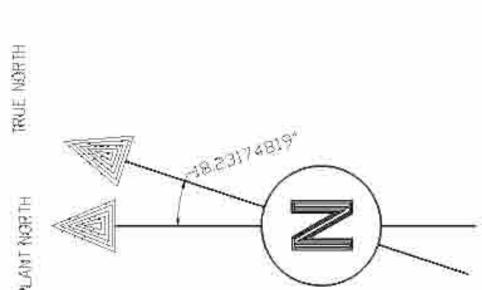
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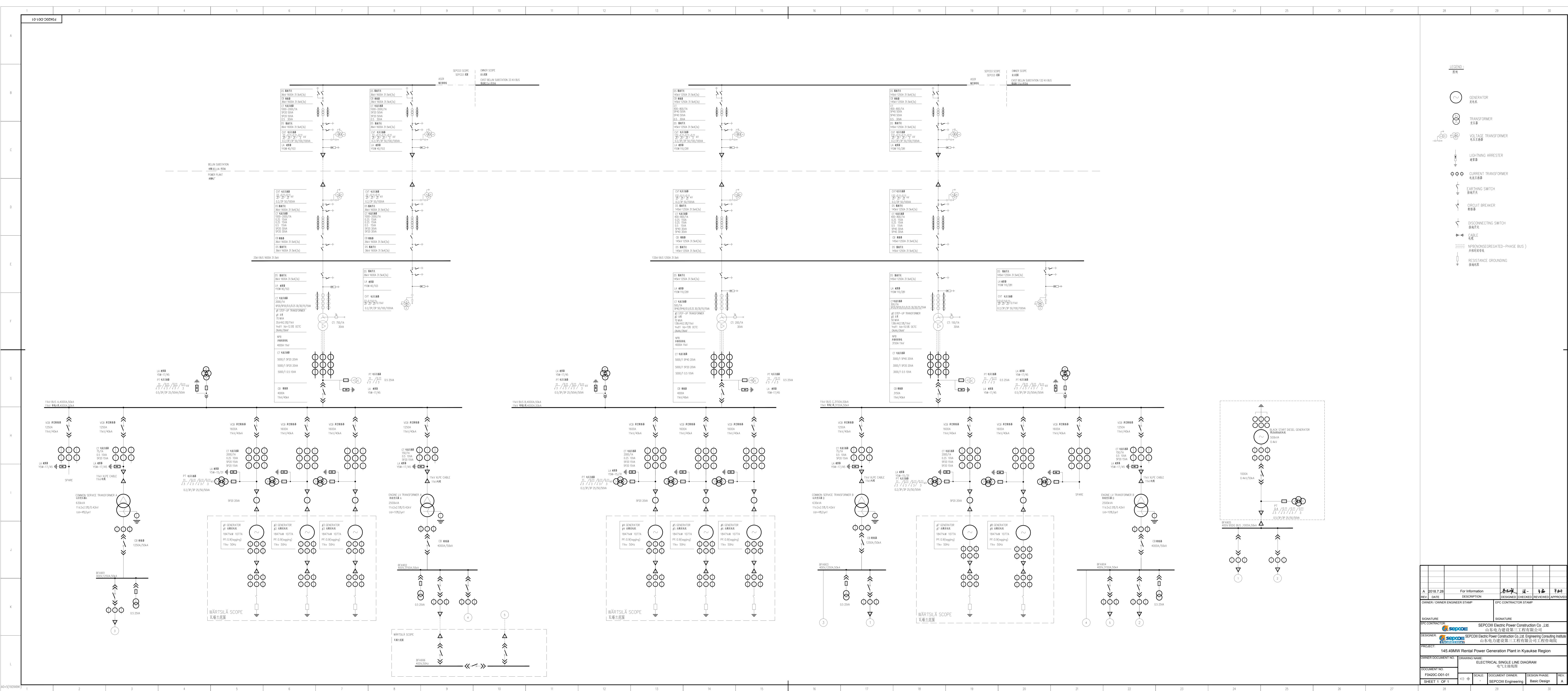




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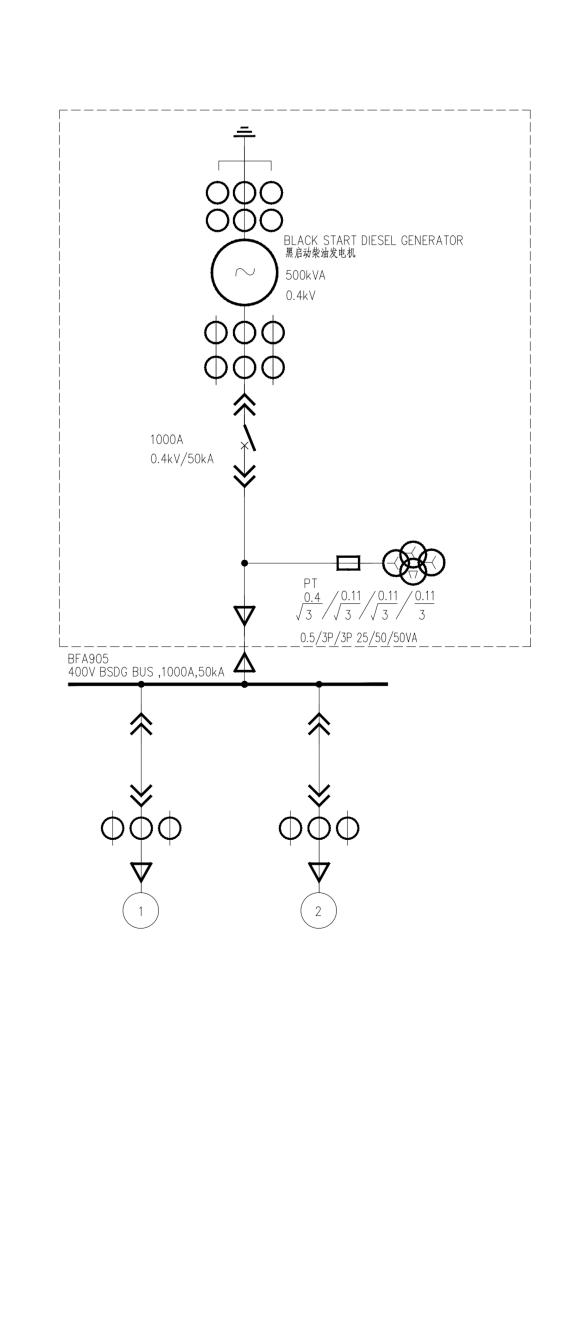
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	\otimes	鬼缆终端 CABLE TERMINAL	
		水平开启器离开关 DISCONECT SWITCH	
		支椎絶縁子 POST INSULATOR 線子箱	
		TERMINAL BOX	
	NOTE: 注意: 1.ALL DIMENSIONS ARE IN MILLIME ARE IN METERS UNLESS OTHER	MSE.	1.52
	除了特殊说明,所有的尺寸单位为毫未,按 2.ALL EQUIPMENTS DIMENSION AF FINALIZED IN OETAIL DESIGN. 所有设备的尺寸尺是初步数据,最终数据算 3.REFERENCE DRAWINGS: 参考图派: F0420C+D01+D1-ELECTRICAL 电气主接线图 FD420C+D01+D3 SECTION DRA INCOMING & OUTGOING BAY 3.3K V&1.32K V升压站进出线线面函	RE PRILIMINARY, WHICH WILL BE 设计投资定。	RD
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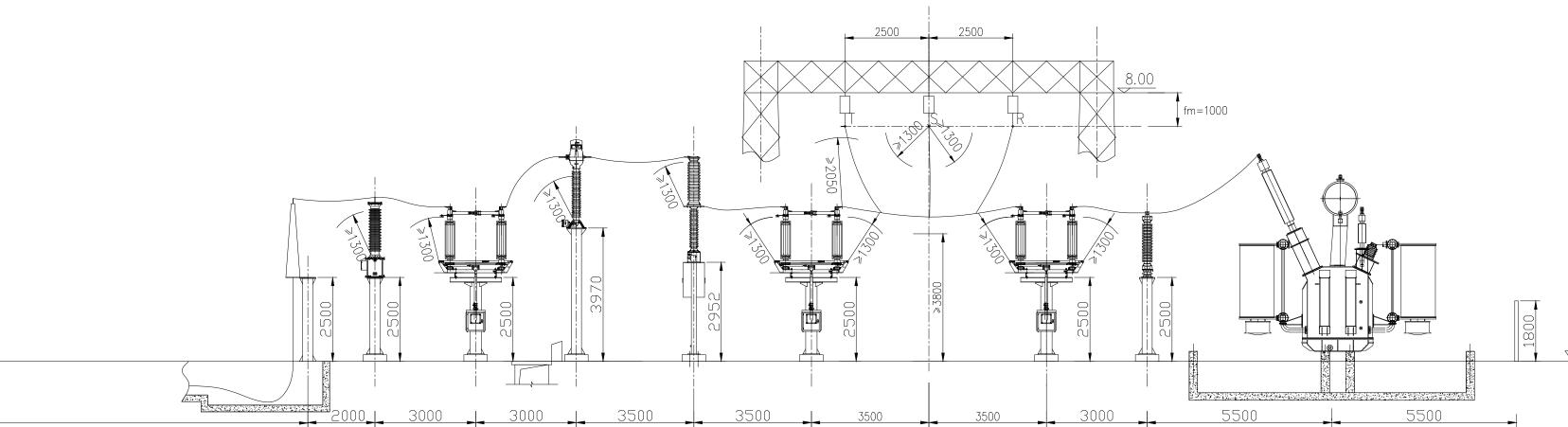
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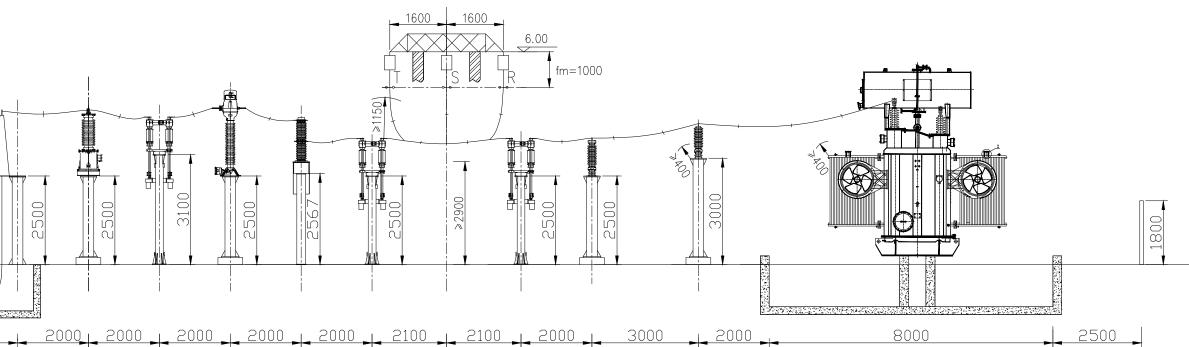


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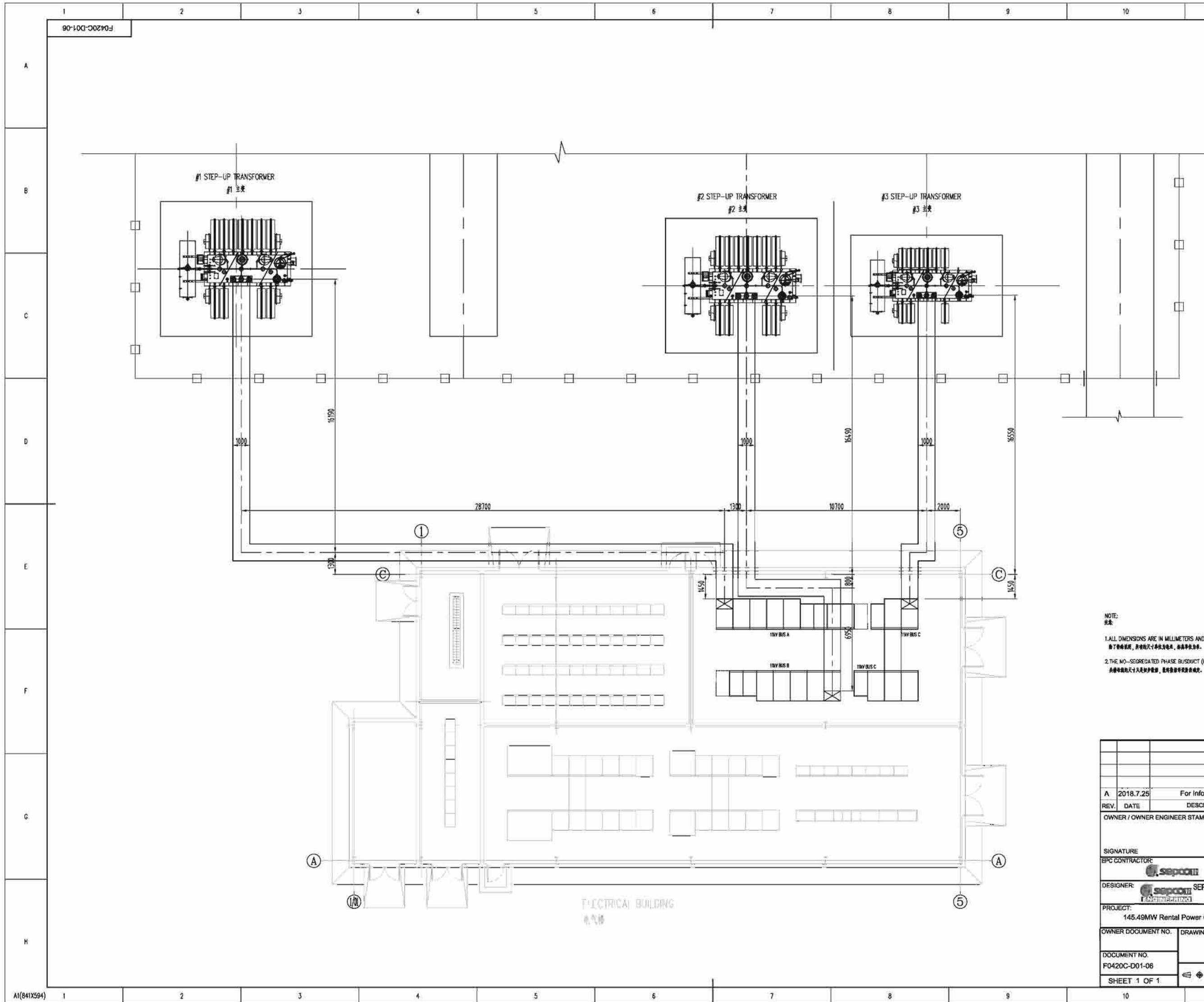
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33kV升压转进出线制面图 PROJECT: 145.49MW Rental Power Generation Plant in Kyaukse Region SECTION DRAWING OF 33KV SWITCHYARD INCOMING & OUTGOING BAY OWNER DOCUMENT NO. DRAWING NAME: SECTION DRAWING OF 33KV&132KV SWITCHYARD SECTION DRAWING OF 33KV&132KV SWITCHYARD SECTION DRAWING OF 33KV&132KV/HICHYARD SECTION DRAWING S OUTGOING BAY SECTION DRAWING OF 33KV&132KV/HICHYARD SECTION DRAWING S OUTGOING BAY SECTION DRAWING S OUTGOING S OUTGOING BAY SECTION DRAWING S OUTGOING S OUTGOIN					REV. DATE OWNER / OWNER ENGINEER SIGNATURE EPC CONTRACTOR:	DESCRIPTION C STAMP EPC SIGN SEPCOIII Electr 山东电力3	DESIGNED CHECKED CONTRACTOR STAMP ATURE Tic Power Constructic 建设第三工程有限	REVIEWED APPROVED on Co .,Ltd. 上公司	E
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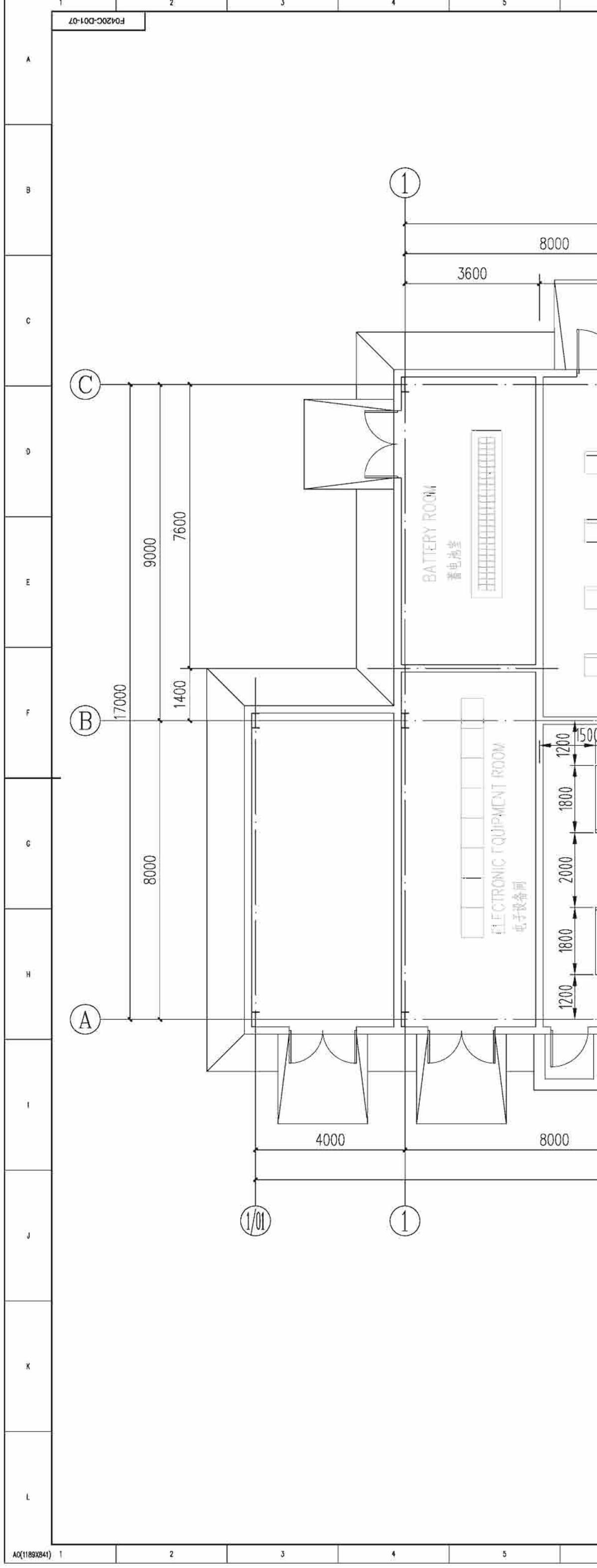
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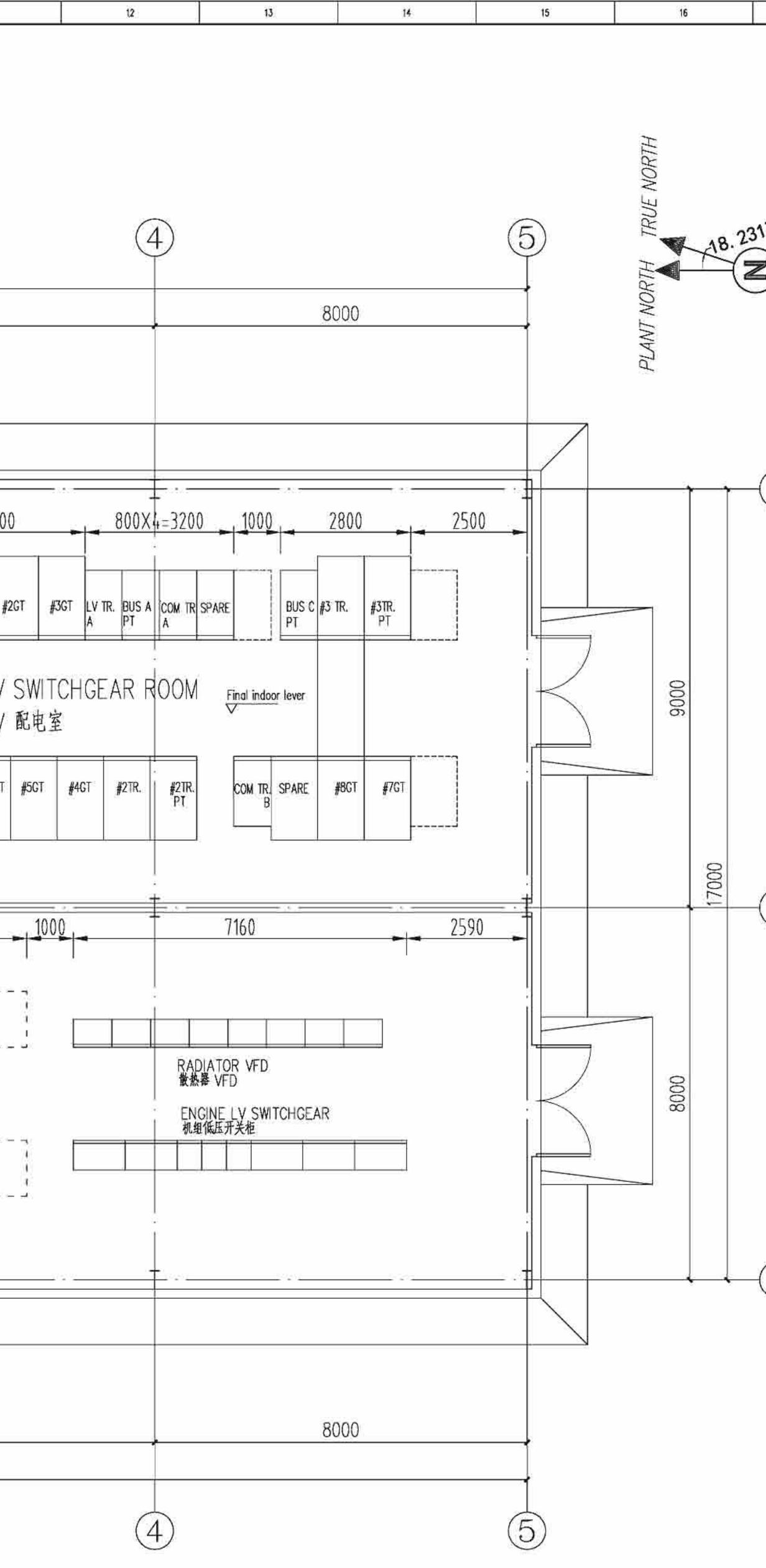
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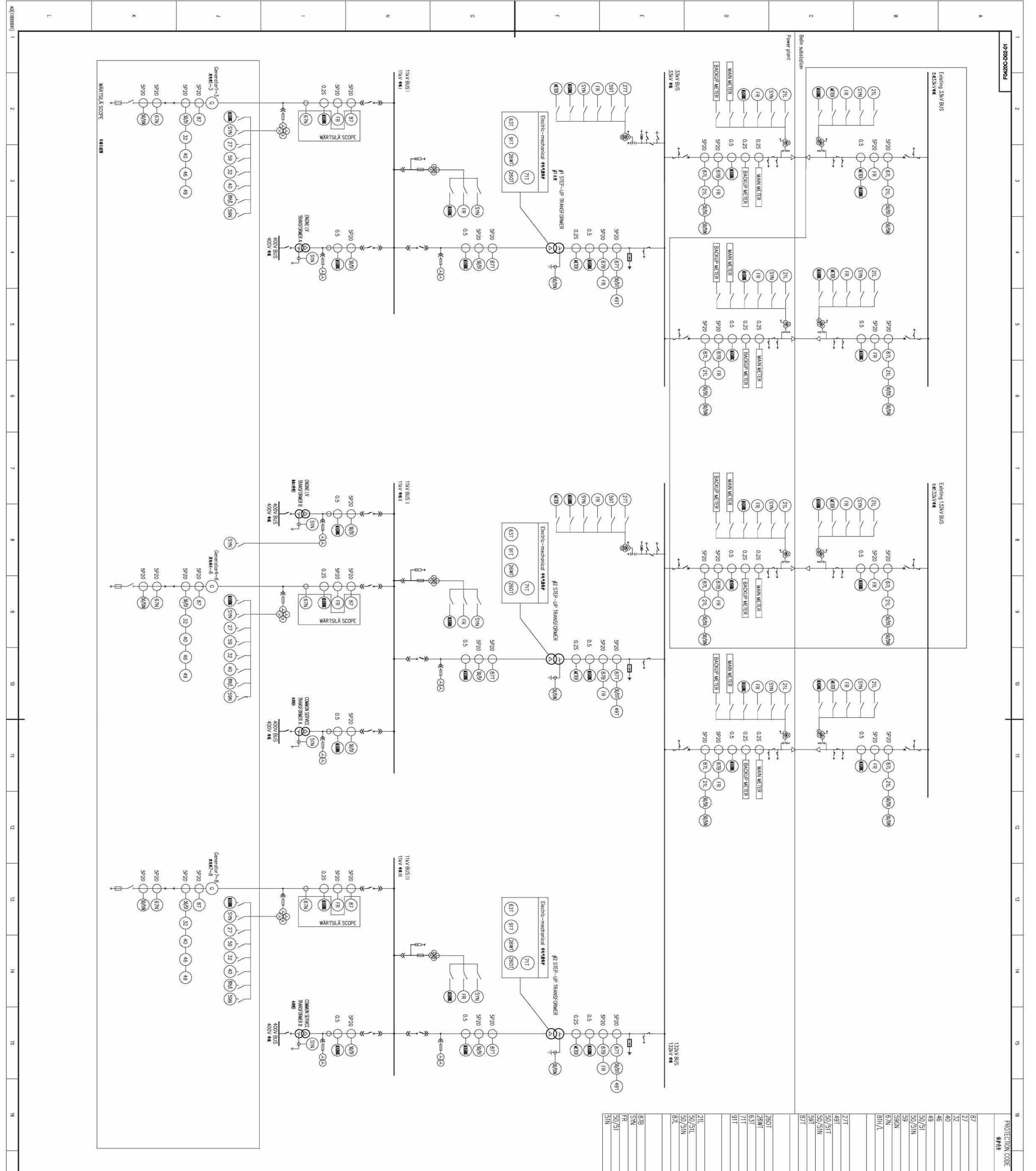
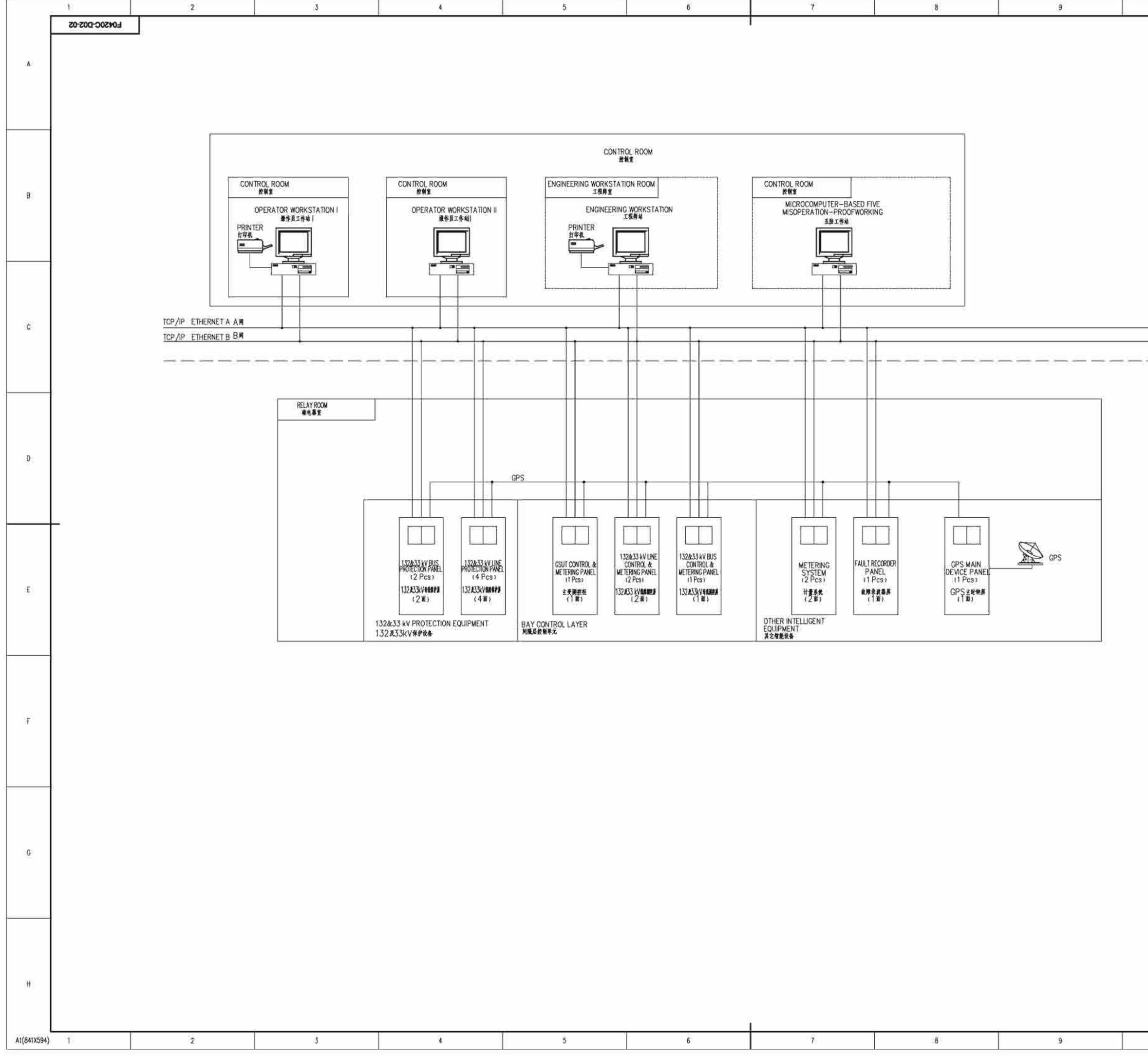
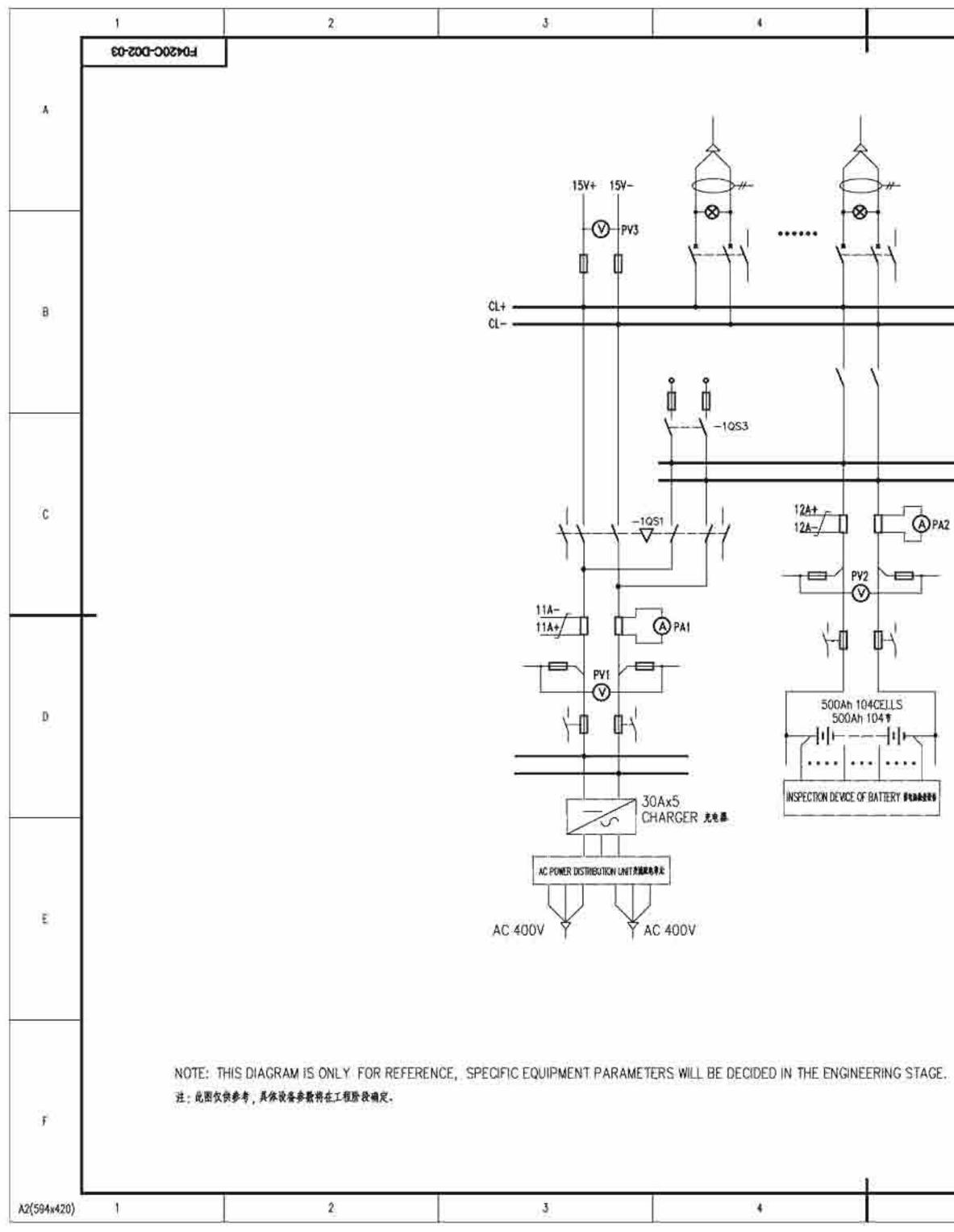


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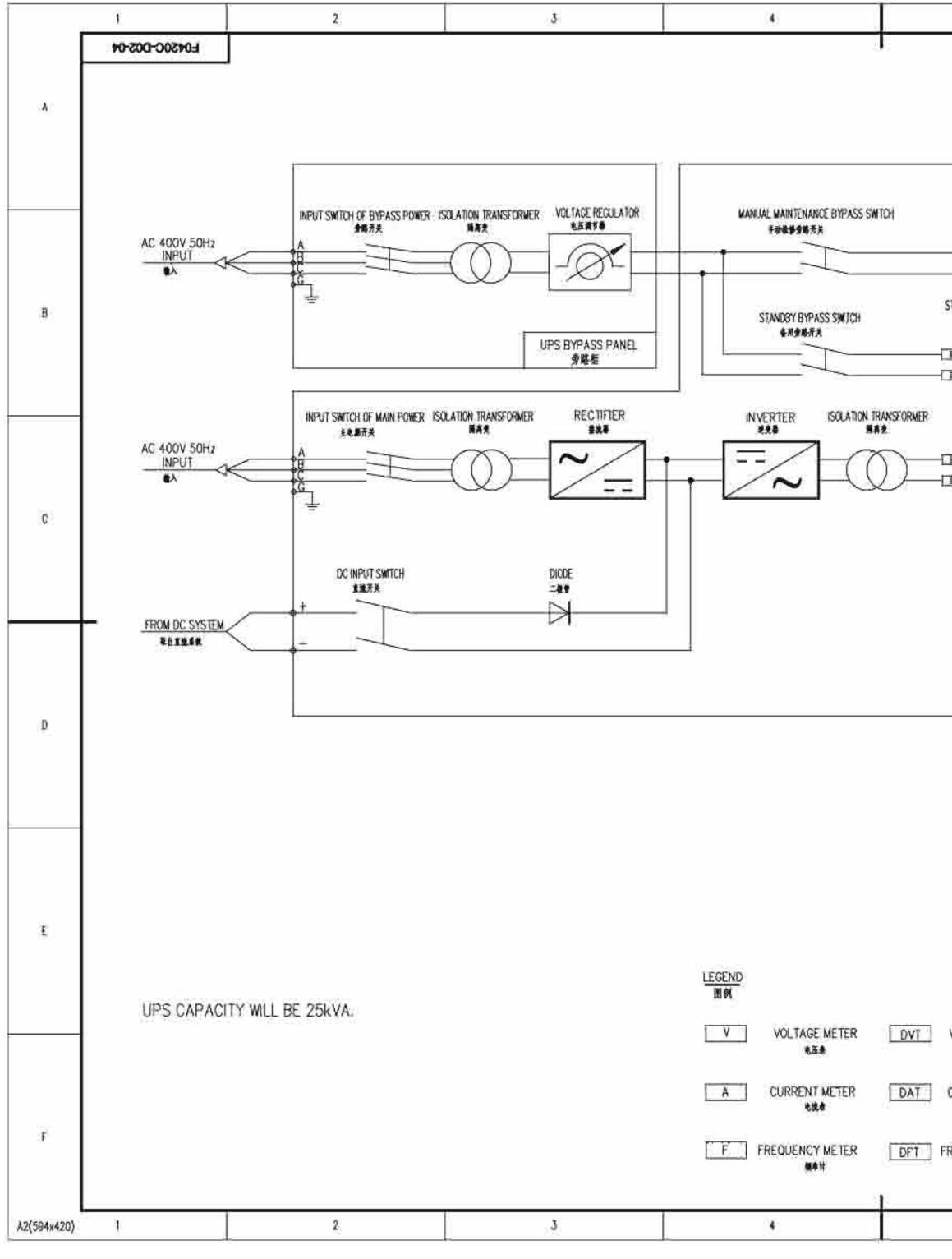
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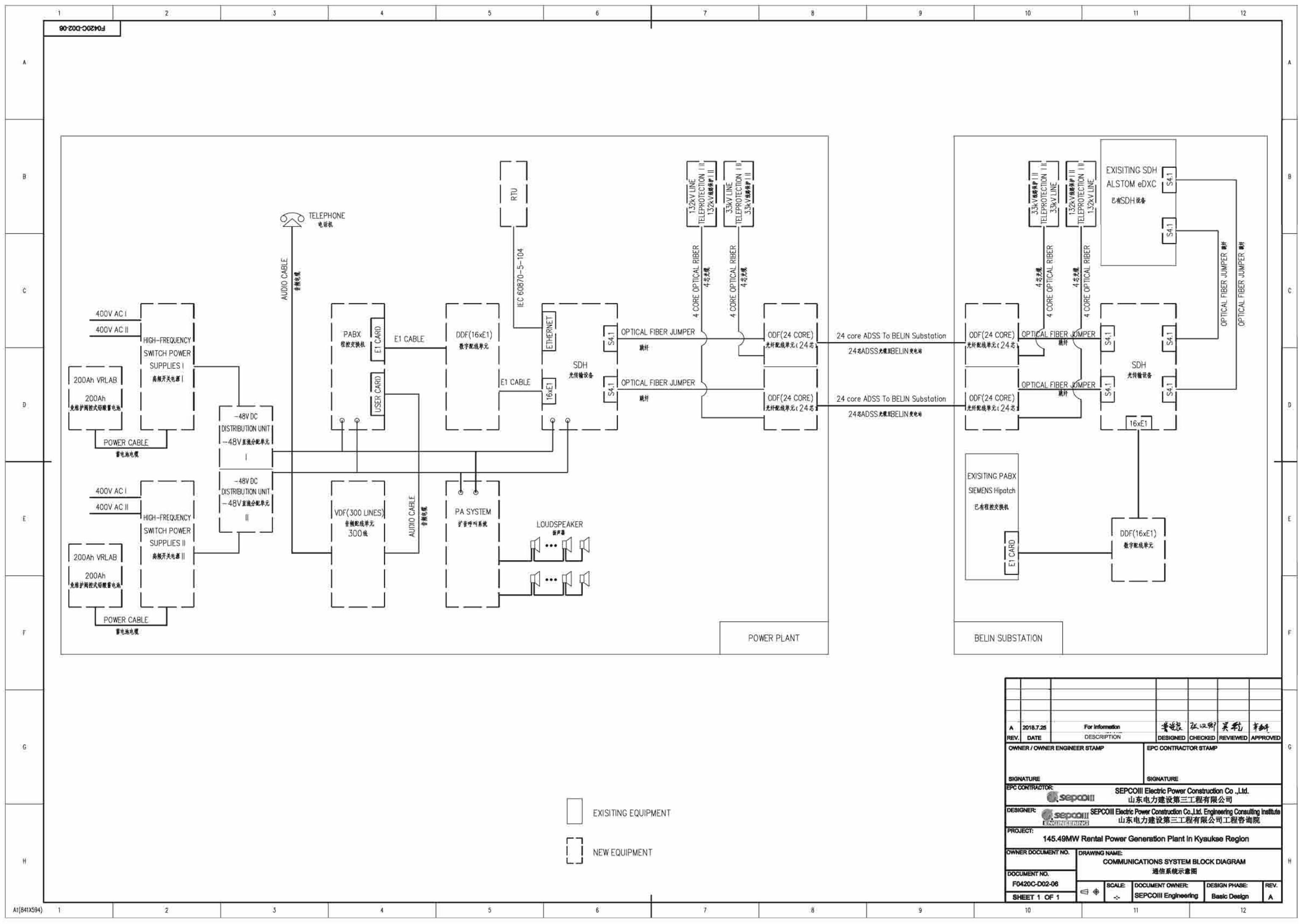
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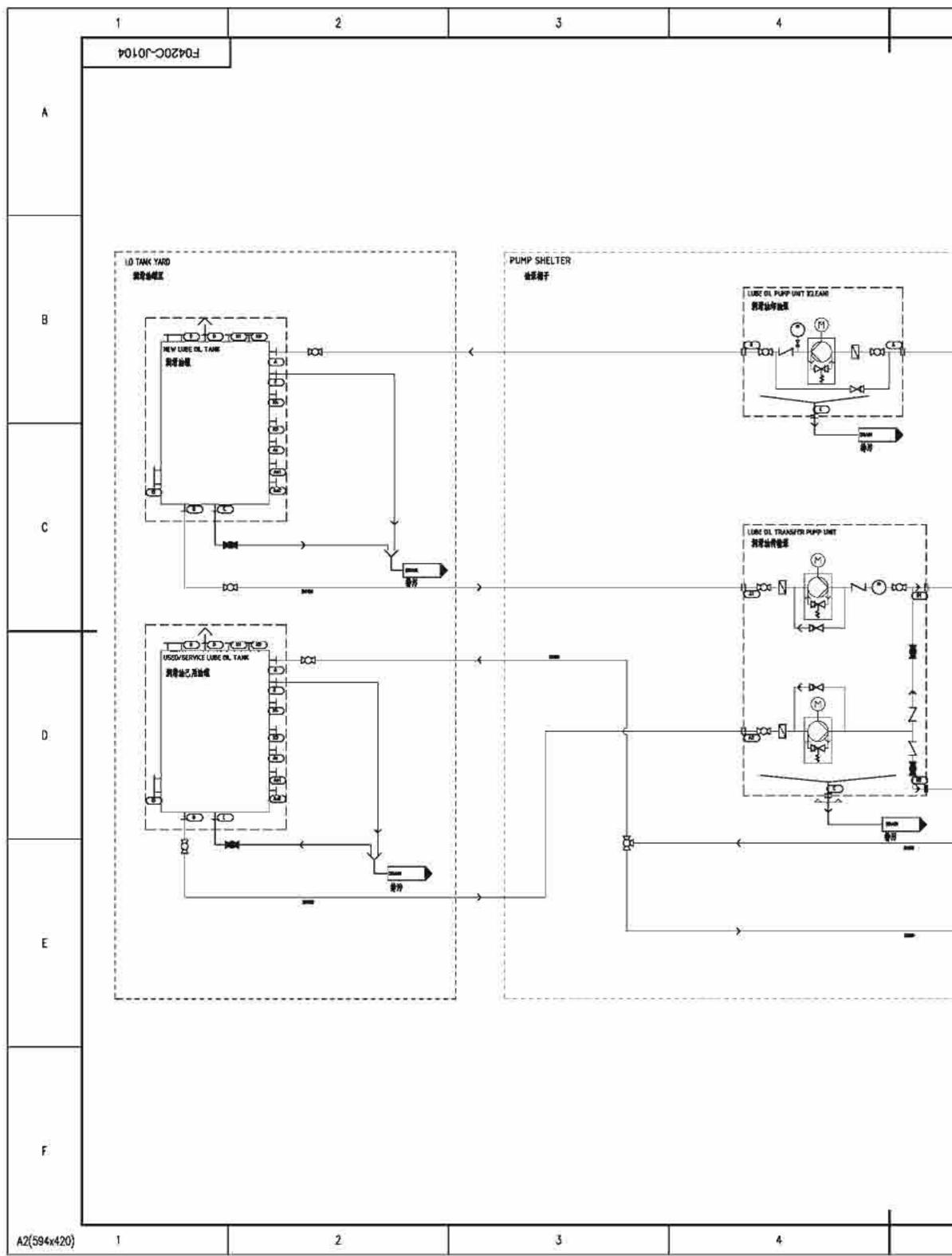


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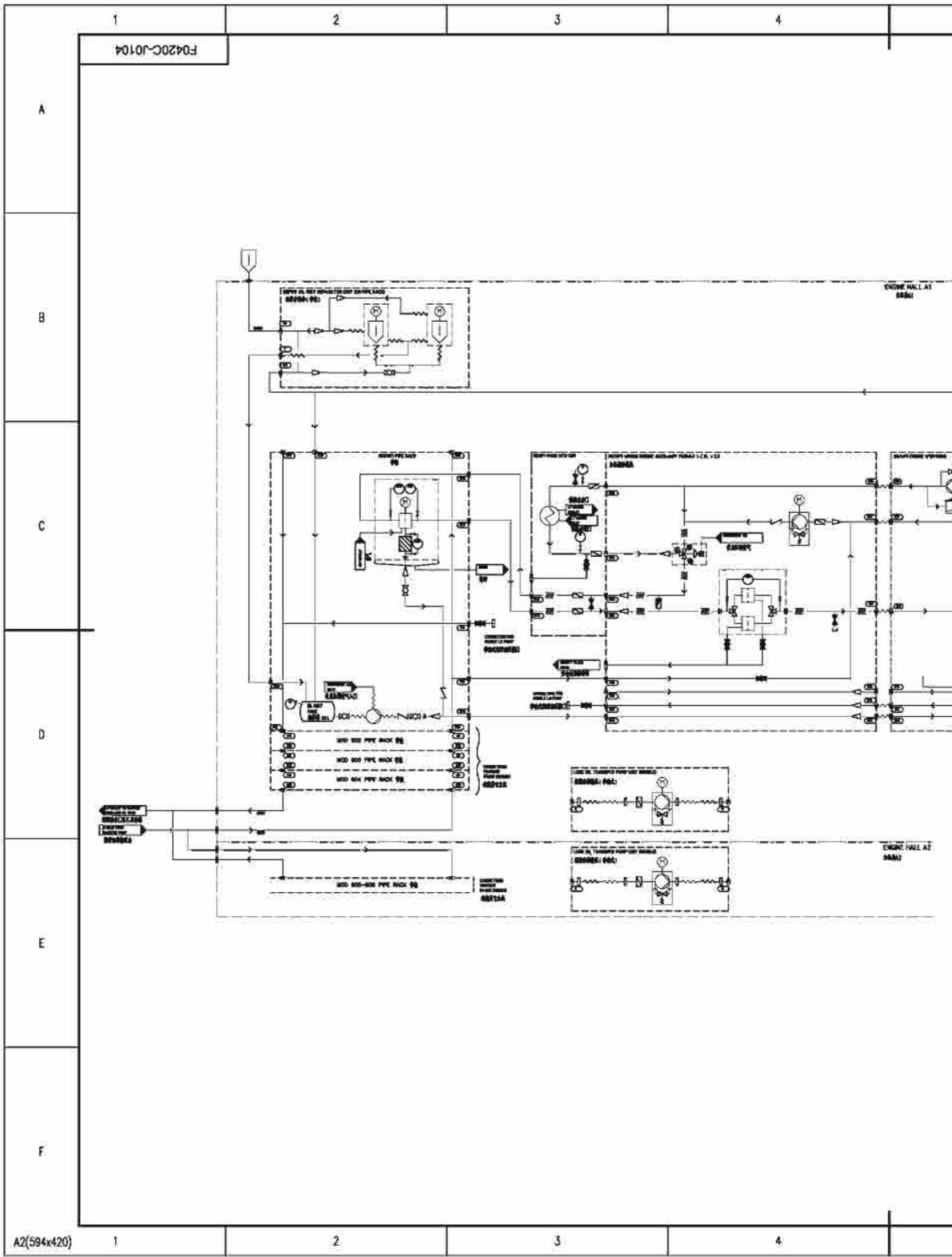


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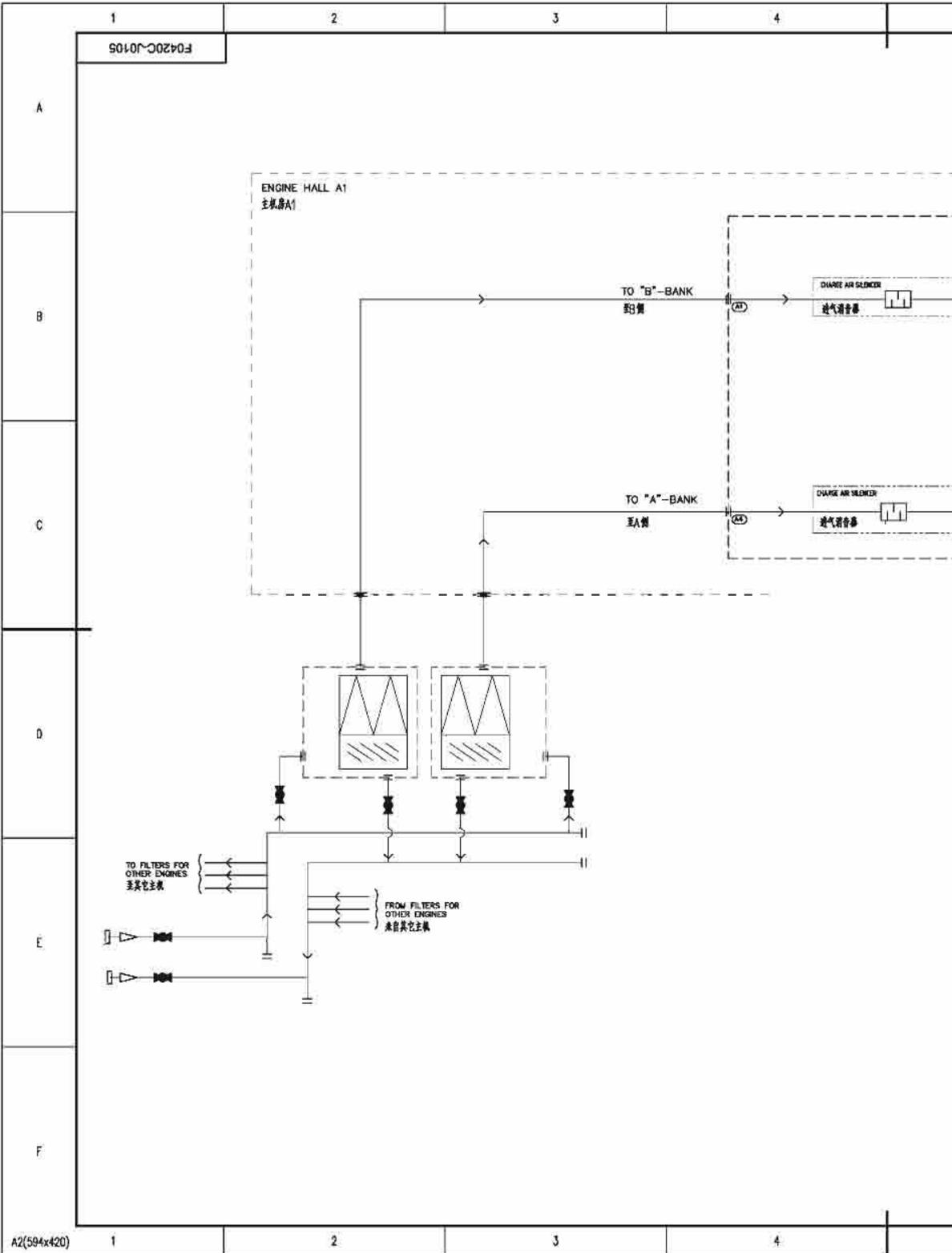
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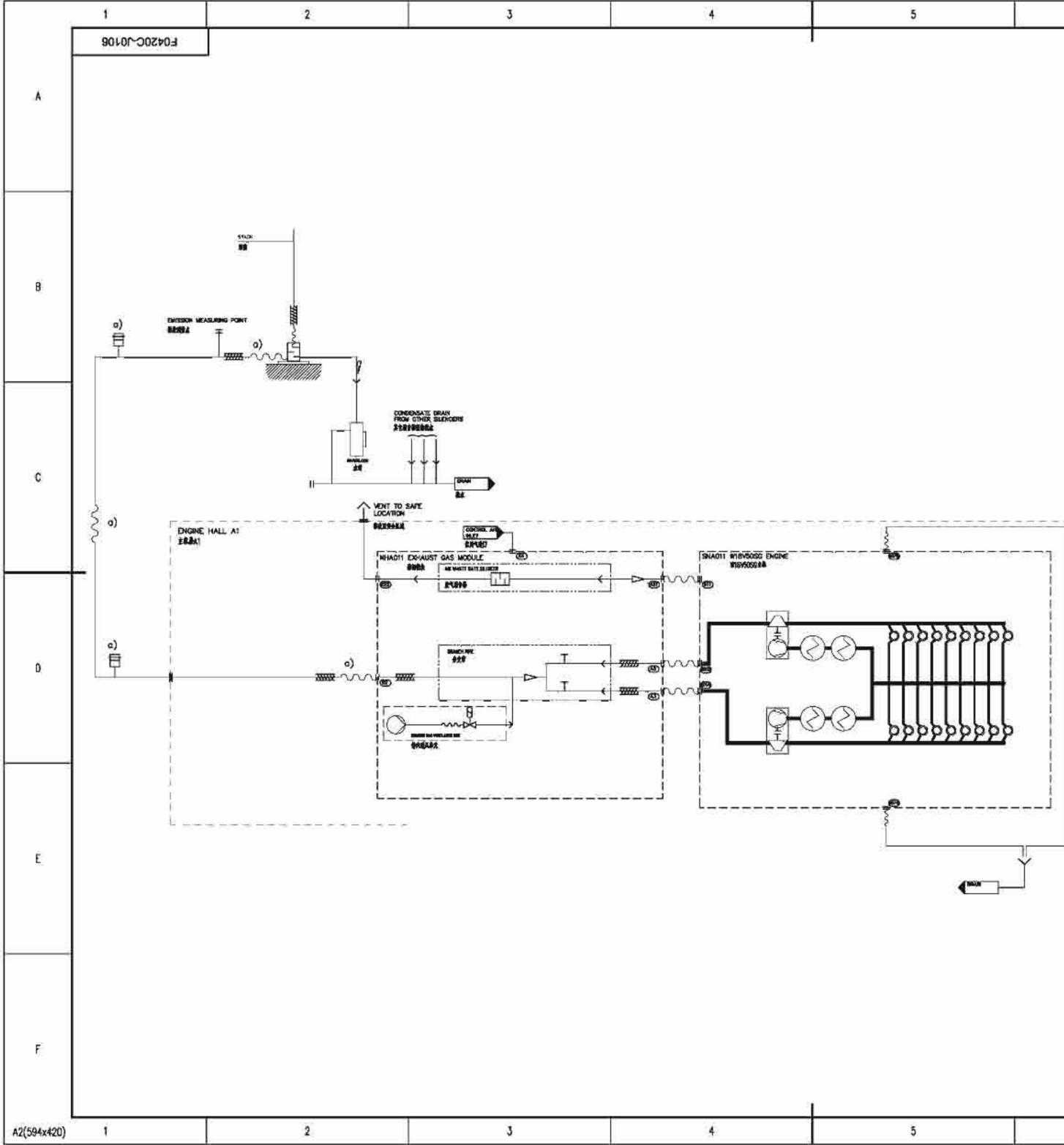
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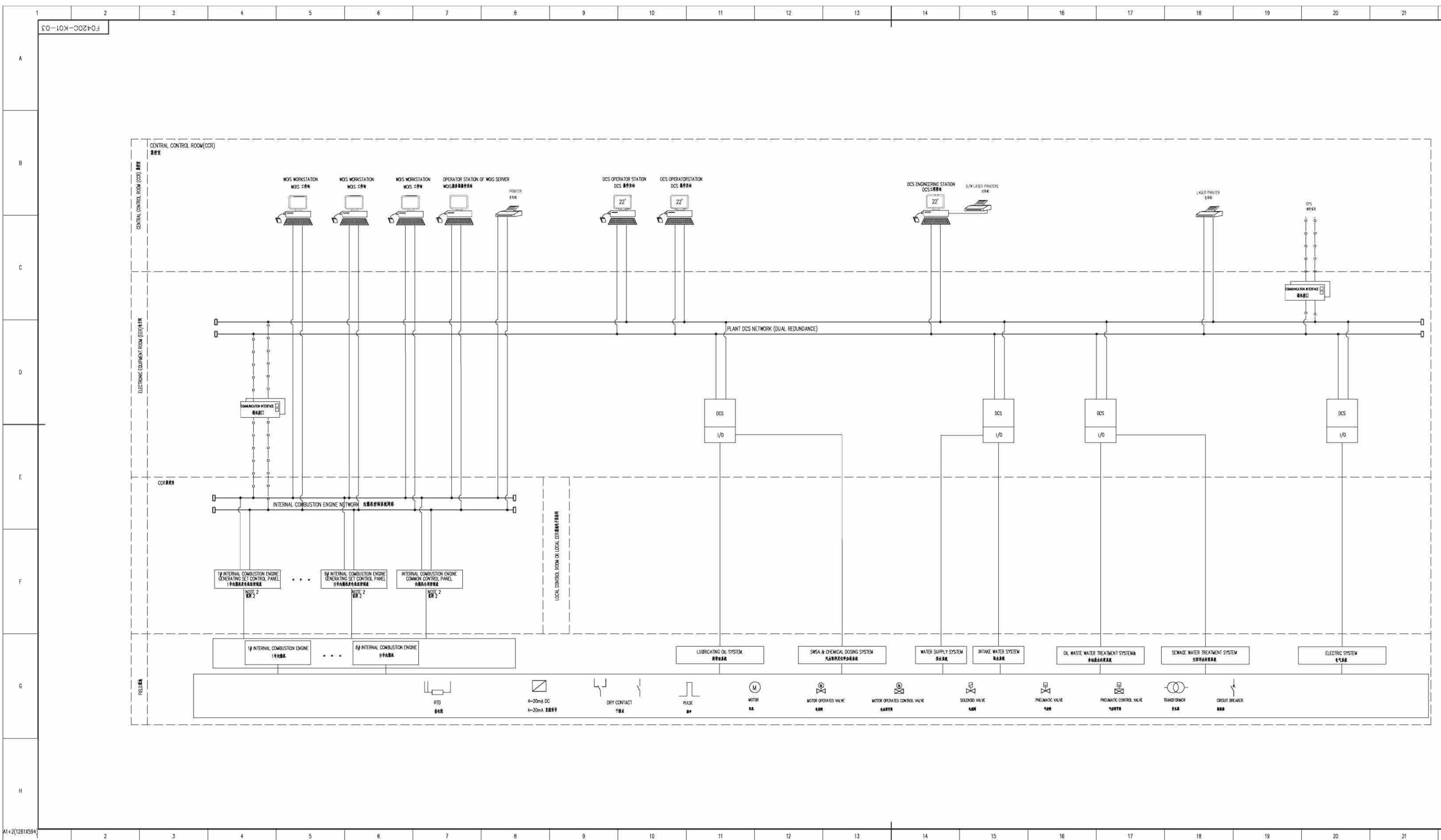
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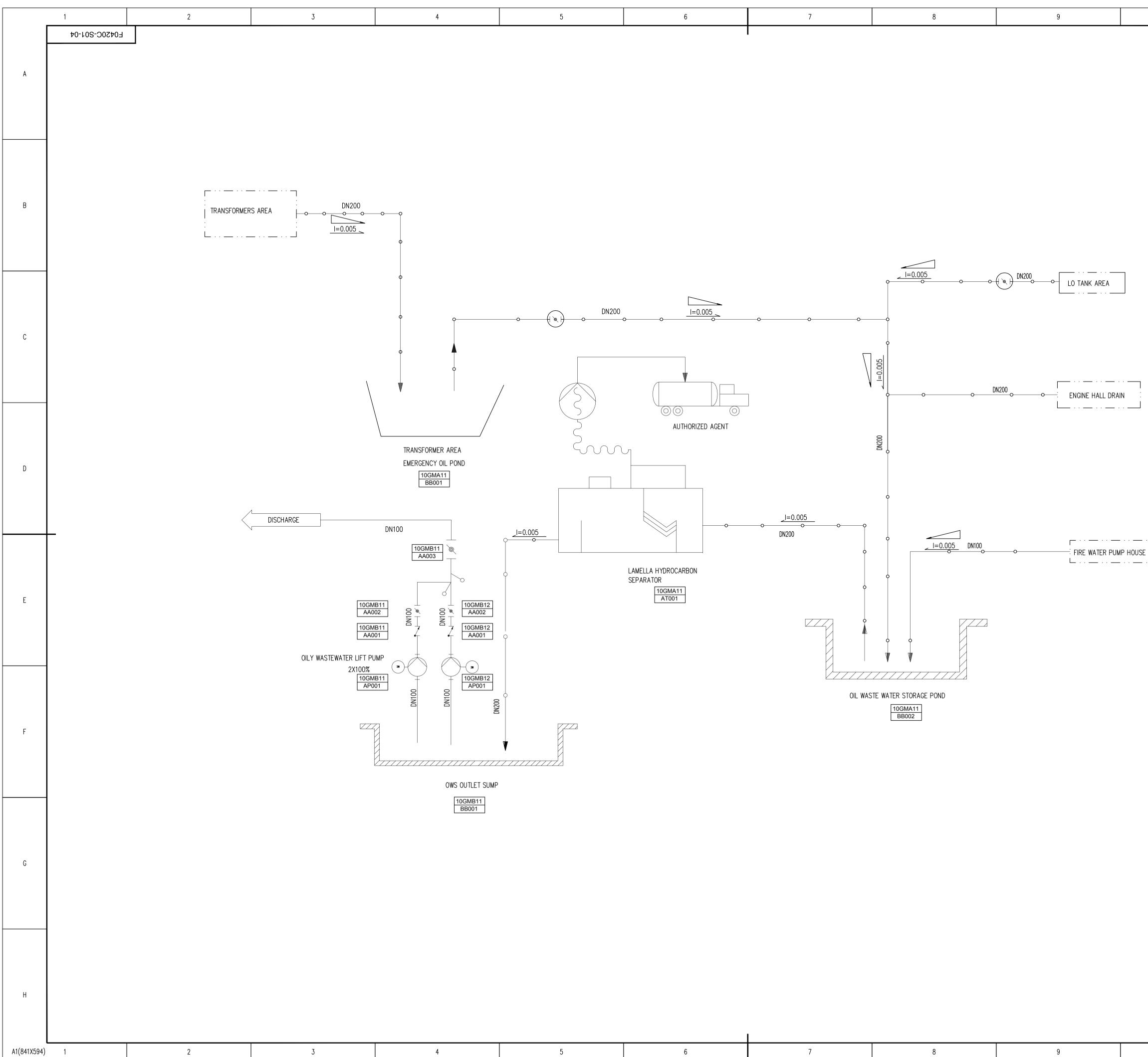


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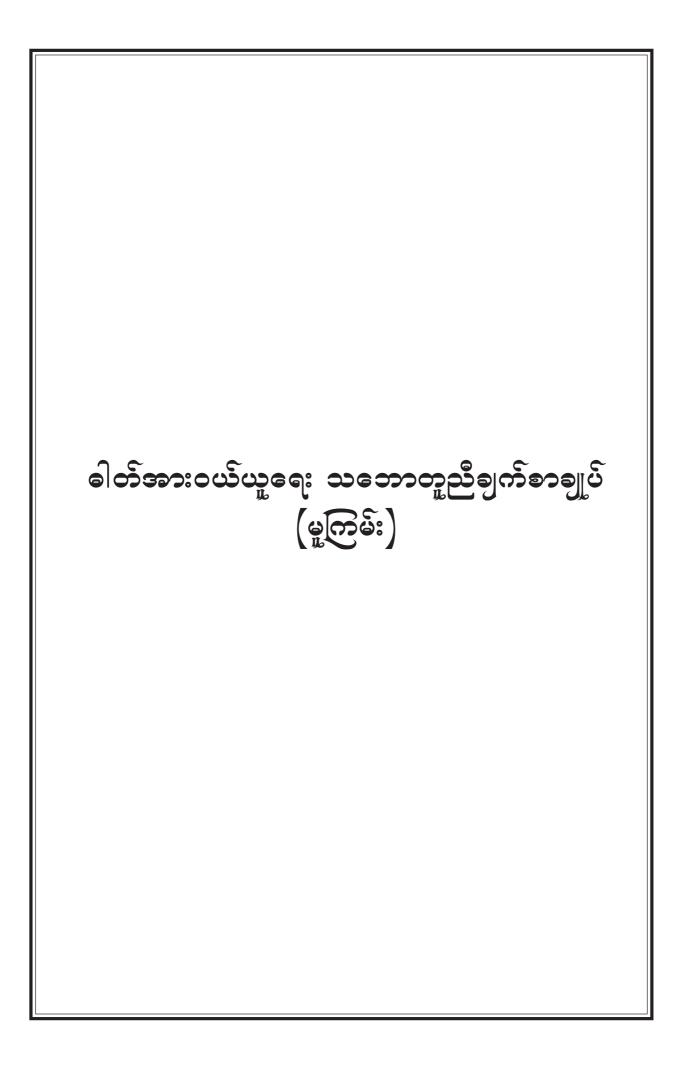
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THE GOVERNMENT OF THE REPUBLIC OF THE UNION OF THE MYANMAR MINISTRY OF ELECTRICITY AND ENERGY ELECTRIC POWER GENERATION ENTERPRISE

LETTER OF ACCEPTANCE

This Letter of Acceptance (this "LOA") is issued on May (27), 2018 ("Commencement Date") in Naypyidaw, Myanmar, by Electric Power Generation Enterprise, Ministry of Electricity and Energy. Building No. 27, Naypyitaw, ("EPGE") represented by the Managing Director, Mr. Khin Maung Win to the Consortium of National Infrastructure Holdings Company Limited, Tellhow International Engineering & Contracting Company Limited, Myanmar Chemical & Machinery Company Limited and SEPCOIII Electric Power Construction Company Limited represented National Infrastructure Holdings Company (NIHC) with registered address at No. 36, Theinphyu Road, Pazundaung Township, Yangon, Myanmar the ("NIHC Consortium") represented by Mr. Maung Kyay (Managing Director, NIHC).

EPGE and the NIHC Consortium shall each be referred to as a "Party", and collectively the "Parties".

- 1. The Government of the Republic of the Union of Myanmar laid down the policy to meet the demand for electric power in the country and to fulfill this demand for electric power in the Regions/States, the Ministry of Electricity and Energy ("MOEE") published in the local newspaper an open invitation to all foreign and local investors to submit a proposal in response to the SRFP issued by EPGE on January 6, 2018 including amendments thereof, for the purchasing of electricity on Rental basis in kyaukse Region, ("Invitation");
- 2. In response to the Invitation, MOEE received various proposals including the commercial offer from the companies ("Tender Response"), and after evaluating the said proposals, MOEE has determined to award the NIHC Consortium as the successful tenderer; and
- 3. The Parties intend to enter into this LOA to confirm their mutual understandings prior to entering into a definitive Agreement for the Power Purchase Agreement for the hire of gas engines in accordance with the terms hereof.
- 4. The NIHC Consortium intends to incorporate a project company, with the members of the consortium as mentioned above in the project company, for the purpose of signing the definitive Agreement with EPGE.



Terms and Conditions

EPGE intends to purchase electricity from the NIHC consortium and the NIHC consortium intends to sell the electricity (145.49MW)to EPGE, subject to the terms and conditions substantially agreed and provided in the Form of Agreement ("Form of Agreement") attached hereto as Attachment 1, and containing the fundamental terms and conditions summarized below.

Words and expressions defined in the Form of Agreement shall have the same meaning when used herein, unless otherwise defined herein.

Project	Purchasing of electricity (145.49 MW) on Rental basis in Kyaukse Region
i	60 months starting from Commercial Operation Date, subject to term
Agreement Term	extensions by agreement of both Parties and provision of three (3) months'
	advance notice by EPGE to the NIHC Consortium.
Implementation of the	The NIHC Consortium shall commence construction, mobilization and
project	shipment of equipment on the Commencement Date.
Commorpial On protion	Commercial Operation Date shall occur within 286 days from the
Commercial Operation	Commencement Date or otherwise (subject to extensions due to Excusable
Date	Delays)
	The NIHC Consortium shall timely obtain and maintain throughout the
Approvals	term all permits, approvals and licenses required under Myanmar laws and
and Licenses	regulations for the Parties to perform their respective obligations in relation
	to the Projects
Site Delivery and Assess	EPGE shall ensure the availability of the Site at the Commencement Date
Site Delivery and Access	and the Ancillary Land.
Fuel Availability	EPGE shall be responsible to arrange natural gas 30 MMCFD from
Fuel Availability	SHWE Gas for running the power plant to its Net Guaranteed Output
	Net Guaranteed Output shall be 145.49 MW and Net Guaranteed Heat Rate
Net Guaranteed Output	shall be 8253.80 Btu/kWh at any site condition based on higher heating
and Net Guaranteed Heat	value.
Rate and Take or Pay	Annual Take or Pay shall be made minimum 80% availability of the power
	plant.
Payments	All applicable energy payment shall be paid by EPGE to the NIHC
rayments	Consortium in Myanmar Kyats.
Delivery Point	EPGE shall provide permission for connection to Bellin Substation.
	The Power Plant, associated infrastructure and related equipment procured
Ownership of Power Plant	and owned by the NIHC Consortium shall remain the property of NÌHC
	Consortium
Tariff	31.7949 USD/ MWh inclusive of 2.5% withholding tax and custom duty.
1 20 177	5% Commercial tax shall be paid separately.





Each Party, acting in good faith, shall cooperate with relevant authorities and obtain all necessary approvals to approve the terms of the Form of Agreement so as to enable it to enter into full effect (90) days from the Commencement Date. If the form of agreement needs to make the revision upon comments of any governmental authority, the Parties will meet and discuss in good faith a fair compromise. Prior to the execution of the Agreement for the 145.49 MW Power Plant each Party shall co-operate with the relevant authorities to do all things that will be reasonably necessary for the implementation of the Project. The duly authorized representatives of each of the Parties have signed this LOA at the place and on the date written above.

LOA is issued by: Electric Power Generation Enterprise

Khin Maung Win Managing Director Electric Power Generation Enterprise LOA is accepted by: National Infrastructure Holdings Company (NIHC)

Maung Kyay Managing Director National Infrastructure Holdings Company (NIHC)

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MINISTRY OF ELECTRICITY AND ENERGY

POWER PURCHASE AGREEMENT

BETWEEN

ELECTRIC POWER GENERATION ENTERPRISE

AND

POWERGEN KYAUKSE COMPANY LIMITED

FOR

145.49 MW GAS ENGINES POWER PLANT

AT

KYAUKSE DISTRICT, MANDALAY REGION

NAY PYI TAW

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[Date]

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N. Of

Power Purchase Agreement for 145.49 MW gas engine power plant at Kyaukse District, Mandalay Region.

1. Preamble.

This Power Purchase Agreement for 145.49 MW Gas Engines Power Plant at Kyaukse District, Mandalay Region (hereinafter referred to as the "Agreement") is made on [●] 2018 between Electric Power Generation Enterprise, Ministry of Electricity and Energy, Building No.27, Naypyitaw, (hereinafter referred to as "EPGE" which expression includes its successors and legal representatives) represented by U Khin Maung Win, Managing Director on the one part; and

PowerGen Kyaukse Company Limited, with registered address at 36, Theinphyu Road, Pazundaung Township, Yangon (hereinafter referred to as the "Company" which expression includes its successors and legal representatives) represented by U Maung Kyay on the other part.

The Company has been formed by the the consortium of National Infrastructure Holdings Company (a Myanmar Company), Tellhaw International Engineering & Contracting Company Limited (a Chinese Company), Myanmar Chemical & Machinery Company Limited (a Myanmar Company) and SEPCOIII Electric Power Construction Co., Ltd.,(a Chinese Company).

The Company and EPGE shall each be referred to as a "Party", and collectively the "Parties". The Parties agree as follows:

2. Objectives.

As the Government of the Republic of the Union of Myanmar laid down the policy to meet the demand for electric power in the country and to fulfill this demand for electric power in the Regions/States, the Ministry of Electricity and Energy (hereinafter referred to as "MOEE") published in local newspaper an open invitation to all foreign and local investors to submit a proposal for power generation by gas engine generators near Kyaukse Region, using natural gas resources from "SHWE" offshore (hereinafter referred to as "Invitation"). In response to the Invitation, MOEE received various proposals including the commercial offer and technical offer from the Company, and after evaluating the said proposals, MOEE through EPGE selected the Company as the successful tenderer.

References to days or months throughout this Agreement are respectively to calendar days or calendar months, unless otherwise stated.

3. Terms and Conditions.

The terms and conditions of the Agreement are as follows:-

Obligations of EPGE.
 Subject to the Company's fulfillment of its corresponding prerequisite obligations:

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- i. EPGE (a) shall ensure that (1) the land area for the site (as designated on the map in Annex 1) meets the specifications provided by the Company (the "Site") and the availability of the Site for the term of this Agreement. EPGE shall make the Site available on the issuance of the Letter of Acceptance (LOA) by EPGE to the Company 7th May 2018 (the "Commencement Date"); and (2) land area required for the construction of all required gas supply infrastructure for the Gas Engines (including the Gas Supply Infrastructure and transmission lines)) meets the specifications provided by the Company (the "Ancillary Land"), and (b) shall (throughout the term of this Agreement and until all the gas engines, spare parts, ancillary equipment, consumables, and supplies owned by the Company as described in Annex 4 (the "Gas Engines") have been demobilized) ensure the Company and Company Personnel (as defined below) have all the access and use rights to and over the Site and the Ancillary Land sufficient for the Company to perform its obligations hereunder and to protect the Company's rights and title over the Gas Engines.
- ii. EPGE shall be responsible for ensuring that the Company and the Company Personnel shall not be held liable for any third-party claim as a result of the location or use of the Site or the Ancillary Land by the Company or Company Personnel, including in respect of acceptable noise which shall comply with regulation of Health Safety Environment (Annex 9) that may be created by the Gas Engines.
 - EPGE shall at its own cost be responsible for supplying at all times to the gas intake value, the location of which is indicated in Annex 1 (the "Gas Intake Point") the natural gas using (28.5 MMSCFD), at gas pressure (main supply) minimum 181.3 PSI (+/-5%) natural gas from "SHWE" offshore necessary for the operation of the Gas Engines of sufficient quality, pressure and volume meeting the Gas Specifications described in Annex 2 and subject to the Technical Specifications in Annex 4. Continuing gas supply under this clause must first be made available to the Gas Intake Point at least (30)days prior to the Original Commercial Operation Date including for purpose of testing and commissioning of the Gas Engines, and EPGE shall provide 60 days' advance notice for any deviation from the estimated Commercial Operation Date of the availability of such gas supply. EPGE acknowledges and agrees that if it is unable to comply with its obligations under this paragraph, the guaranteed power output under this Agreement (including in Clause 3(b)(ii) and Annex 4) will be affected. Notwithstanding, EPGE shall not be excused from its obligation to pay under this Agreement (including in Annex 5).



iii.

- iv. During the term of this Agreement, EPGE shall instruct the Company to operate the Gas Engines according to the guidance of the load dispatch center pursuant to Annex 3.
- v. EPGE shall make arrangements and provide all documentary support as may be required by the relevant Myanmar authorities to ensure that multiple entry visa and Long Stay Permits are issued to allow the requisite personnel of the Company to enter, remain in and depart from Myanmar over the term of this Agreement or any extended term for the purpose of providing the services set out in Annex 6 ("Scope of Services") to meet the Company's obligations hereunder (the "Company Personnel").
- vi. EPGE shall provide approvals for the connection to 132 kV Belin substation for Kyaukse for the purposes of supplying electricity, and all sufficient utilities and power for the provision of the Scope of Services by the Company and cooperate with the Company Personnel with respect to all the activities under this Agreement; the Company shall supply necessary cables and equipment to receive the said power and utilities.
- vii. **EPGE** shall be responsible for ensuring the energy payment in accordance with the Annex 5 of this Agreement.
- viii. EPGE shall pay energy payment to the Company with effect from the Original Commercial Operation Date where EPGE fails to supply gas as is necessary for the testing and commissioning and operation of the Gas Engines as provided under this Agreement.
- ix. EPGE shall provide the Company with a letter within (<u>12090</u>) days after the Commencement Date, which letter shall contain confirmation of the approval of the project by the Union Government.
- x. EPGE shall exercise its best endeavours to assist the Company with obtaining all relevant permits, licences and approvals, which shall include, but are not limited to, the MIC permit and other supporting documents or recommendation letters from the Ministry of Commerce, the Internal Revenue Department, the Ministry of Planning and Finance and the Customs Department, in relation to this project.

(b) Obligations of the Company

Subject to EPGE's fulfillment of its corresponding prerequisite obligations:

- i. The Company shall, by itself and/or through a qualified contractor, provide the Scope of Services;.
- ii. The Company shall installed 8 unit Gas Engines of the total installed capacity of (147.768) MW. Subject to Annex 2 and Annex 8, the Company shall guarantee the Gas Engines to



provide the Net Guarantee Output of 145.49 MW, (the "Net Guarantee Output"). The term of this Agreement is 60 months from the Commercial Operation Date, subject to extension of the term by the agreement of both Parties;

- iii. The Company shall hold its bank account at Myanmar Economics Bank in Naypyitaw or at Myanmar Economics Bank No.3 in Yangon to receive energy_payment made by EPGE.
- iv. EPGE shall make energy payment in the Myanmar Kyats equivelant to the tariff payable that is denominated in US Dellars, based on the official US-Dollars to Myanmar Kyats exchange rate published by the Central Bank of Myanmar on the date of such payment.
- The Company shall arrange all required gas supply infrastructure for the Gas Engines at its own cost to enable EPGE to supply the required gas amount, pressure and quality for the Gas Engines ("Gas Supply Infrastructure").

The Gas Supply Infrastructure includes:

- (a) Approximately 4.85 miles of a new 10 inches gas pipeline from South East Asia Gas Pipe (SEAGP) Off-take Point (KyaukSe) to the site for Gas Engines as mentioned in Annex 1.
- (b) New gas Filtering Unit, Pressure Reduction Skid, Metering System and Vent System.
- (c) The Earth Work & Foundation for the Coalescing Gas Filter/Pressure Reduction Skid, Containerized Control Room and Apron.
- (d) The following buildings;
- One containerized 12 feet × 12 feet control room
- One 12 feet × 15 feet office building alongside with the control room
- One Senior House for supervisor who will manage the gas supply infrastructure
- One Junior House for two shift engineers
- One Labor Barrack
- (e) Electricity and water supply for the gas supply infrastructure for the Gas Engines.

For the construction of new gas pipe line (about 4.85 miles) of a new 10 inches gas pipeline from SEAGP Off-take Point to the site for Gas Engines and New gas Filtering Unit, Pressure Reduction Skid, Metering System and Vent System, the Company shall arrange all required materials as mentioned in Annex 4 at Bellin 230 kV substation according to the specifications mentioned in Annex 8 at its own cost and EPGE will supervise the construction and installation of the Gas Supply Infrastructure and shall be responsible for all land acquisition and negotiation on the relevant compensation. The cost of construction and land acquisition and relevant compensation shall be borne by the



Company. The Company shall be responsible for the construction and installation of the Gas Supply Infrastructure at its own cost.

The Company shall arrange all necessary electricity and water Ψ÷V. supply for the Gas Supply Infrastructure for the Gas Engines at its own cost. EPGE shall operate, or it may designate MOGE to operate, the New Gas Supply Infrastructure. Notwithstanding, EPGE shall remain wholly responsible for the operations of the New Gas Supply Infrastructure. The Company shall at its cost, do the maintenance of the New Gas Supply Infrastructure. Whenever the calibration of gas meter is needed according to the prudent utility practice, the company shall arrange the calibration of gas meter at its own cost. The Company shall be the importer-of-record of all the Gas Engines and related equipment, and the Company shall be responsible for completing all customs clearance and all other required formalities for the importation of the Gas Engines in a timely manner. The Company shall bear all cost related to importation of the Gas Engines including actual shipping, transportation and loading costs for the importation under this Agreement.

- The Company shall be responsible for obtaining, and maintaining throughout the term of this Agreement, all the permits, approvals, and licenses required under Myanmar laws and regulations for the Company to perform its obligations under this Agreement, including (a) the inland transport of the Gas Engines and (b) conducting of electricity generation, in each case, as required hereunder.
- The Company shall be responsible for and arrange to [install the 132 KV Transmission Line and connect to the 132 kV bus at the Bellin Substation by installing a new 132 kV switch bay and the required protection equipment in Kyaukse
 - The Company shall be responsible for and arrange to install 1 primary and 1 back-up kilowatt hour meters at the high voltage side of the step-up transformer in the Gas Engines for metering of unit generation and the specification and accuracy class of energy meter shall be provided by EPGE.
 - The Company shall commence generating electricity within 286 days after the Commencement Date unless otherwise agreed between the Parties (which shall be known and defined as the "Original Commercial Operation Date"), which date is extended for each day of Excusable Delays. The Commercial Operation Date of the Gas Engines shall be achieved after (4) hours continuous operation of the Net Guarantee Output and the actual heat rate during this 4 hours continuous operation shall be less than or equal to 8,253.80 Btu/kWh (plant overall) at any site condition based on higher heating value (the "Net Guarantee Heat Rate") (the "Commercial Operation Date"). To determine the Actual Output and Actual Heat Rate of COD test

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of the Gas Engines, energy meter reading of energy meter located at the outgoing 132 kV feeder of Gas Engines and gas meter reading of gas meter located at the high voltage side of the step-up transformer in the Gas Engines shall be used. The Commercial Operation Test shall be witnessed by the Company and EPGE. The total gas consumption for the testing and commissioning shall be less than or equal to (90) mmscf and supplied by EPGE at its own costs. In the event that the total gas consumption for the testing and commissioning of the Gas Engines exceeds the foregoing amount, the Company shall bear and pay such costs for the excess, which shall be calculated at the prevailing monthly rate published by MOGE. EPGE shall not pay for any electricity charge transmitted to the grid during the testing and commissioning and prior to the Commercial Operation Date. The Company shall be responsible for the cost of all electricity used during the construction and installation of the Gas Engines and the Gas Supply Infrastructure, and EPGE shall not be responsible to pay for any electricity charges during such construction and installation (prior to the testing and commissioning of the Gas Engines).

The Company shall arrange the annual tests for the Net Guarantee Output and Net Guarantee Heat Rate which shall be witnessed by EPGE on the date which is the anniversary of Commercial Operation Date. If the result does not conform to the Guarantee value, the Company shall rearrange the tests for the Net Guarantee Output and Net Guarantee Heat Rate within five (5) days.

xii.xi. The Company shall ensure that it is able to meet the agreed Net Guarantee Output for dry seasons throughout the term of this Agreement.

- The Company shall be penalized [150%] of the cost of the additional gas ("Cost of Additional Gas") consumed based on the rate paid by EPGE to the Myanmar Oil and Gas Enterprise if the actual Heat Rate exceeds the guarantee heat rate, provided that the Company shall not be liable for any costs (or pay any penalty) if the additional gas consumption is for any black start due to any reason which is attributable to EPGE. The gas consumption for black start shall be 0.03 mmscf per eingine for normal fast ramp up in 10 minutes, If ramp up take up to 20 minutes, gas consumption shall be 0.06 mmscf. For the purpose of this Clause 3(b)(xijv), the monthly Cost of Additional Gas shall be calculated as follows:
 - (i) if the Actual Heat Rate (Btu/kWh) for that month is equivelant to, or is less than the Net Guarantee Heat Rate, the Cost of Additional Gas shall be zero; or
 - (ii) if the Actual Heat Rate (8tu/kWh) for that month exceeds



the Net Guarantee Heat Rate, the Cost of Additional Gas shall be calculated in accordance with the following formula:

(Actual Heat Rate for the month (Btu/kWh) – Net Guarantee Heat Rate (Btu/kWh)) X actual electricity sent out recorded by the electricity meter for the month (kWh) X gas cost (USD/mmBtu) / 1,000,000

Where:

*Actual Heat Rate for the month (Btu/kWh) = actual gas consumption recorded by MOGE's gas meter for the month (Btu) / actual electricity sent out and recorded by the energy meter located at the high voltage side of the step-up transformer in the Gas Engines for the month (kWh).

**Gas cost shall be provided by MOGE on a monthly basis.

The Company shall pay the Additional Gas Cost (if any) in MMK. The Cost of additional gas (denominated in USD) shall be calculated based on the same USD:MMK (as defined below) exchange rate used in calculating the energy payment for such month in accordance with Clause 4(c).

MAXIII.

The Company agreed to use the gas meter installed at the new gas supply infrastructure for measuring the gas consumption of the Gas Engines.

in respect of any extension of the Original Commercial Operation Date other than the Excusable Delays, the Company shall pay a penalty of Myanmar Kyats 30,000,000 (Myanmar Kyats thirty million only)] per day to EPGE, if the Company fails to achieve commercial operation by the Original Commercial Operation Date. If the penalty in the preceding sentence has accrued for more than thirty (30) days and remains unpaid, EPGE shall be entitled to apply the entire amount of the Performance Bank Guarantee.

The Company shall submit weekly work progress reports every seven (7) days beginning fourteen (14) days after the Commencement Date.

*vii.xvi. The Company shall be responsible to run the Gas Engines with black start facility to synchronize national grid in case of black out of national grid.

Subject to Clause 3(b)(xviiixx), the Company shall dismantle the entire Gas Engines at its own cost within six (6) months



after expiry or termination of the term of this Agreement.

- The Parties shall, upon request by the Company, discuss with each other in good faith on the terms (including as to rent) by which EPGE shall make available the Site to the Company for such additional period no longer than six (6) monthsfollowing the expiry of the six (6) months' period specified under Clause 3(b)(xviixix).
 - ***-xix. The Company shall submit scheduled outage and maintenance plan to EPGE at the start of the Commercial Operation Date and thereafter on each anniversary of the Commercial Operation Date over the term of this Agreement.
- 4. Payment Terms
 - (a) The energy payment payable by EPGE to the Company hereunder shall be calculated based on the provision of Annex 5.
 - (b) EPGE shall pay the requisite amount of energy payment on a monthly basis, and all amounts of energy payment payable under this Agreement shall be paid to the Company's Bank Account.
 - (b)(c) EPGE shall make energy payment in the Myanmar Kyats equivalent to the tariff payable that is denominated in US Dollars, based on the official US Dollars to Myanmar Kyats exchange rate published by the Central Bank of Myanmar on the date of such payment.
 - (c)(d) EPGE shall not pay any amount of electric energy more than the Guaranteed Electric Energy amount for dry seasons and wet seasons as provided under Annex 5, unless the amount of electric energy more than the Guaranteed Electric Energy for dry seasons and wet seasons is instructed by EPGE or the load dispatch center. In the first week after the end of each season, all Parties shall determine the amount of excessive electric energy generated by mutual agreement.
 - (d)(e) The Company shall send invoice to EPGE for payment of the monthly energy payment. If there is no objection to the amount invoiced within three (3) business days of receipt of the relevant invoice, the amount invoiced shall be deemed as having been approved by EPGE and EPGE shall pay the invoiced amount by account transfer within thirty (30) days from the receipt of such invoice. In respect of invoices issued for energy payment where excess amounts invoiced shall be set off from the proceeding invoice for energy payment for the following month. If any dispute arises on the amount of energy payment invoiced, the Parties agree to negotiate in the following month the disputed amount and to pay the undisputed amount in accordance with the foregoing.
 - (e)(f) The Company shall pay all kind of tax payable in Myanmar in accordance with the applicable laws.

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(f)(g) Performance Bank Guarantee:

Within two (2) weeks after the signing of this Agreement, the Company shall deposit a performance bank guarantee with a bank acceptable to Central Bank of Myanmar (the "Performance Bank



Guarantee"), which shall be valid for (30) days after the Original Commercial Operations Date (286) days in the amount of (1,400,000 USD or 2,000,000,000 Myanmar Kyats) to secure its timely completion of its obligations hereunder of the Commercial Operation Date. At the time of providing the Performance Bank Guarantee to EPGE by the Company, EPGE shall return the bid Security to the Company. The Performance Bank Guarantee shall be returned to the Company within seven (7) business days after the successful completion of the Commercial Operation Date.

(h) In respect of any extension of the Original Commercial Operation Date the Performance Bank Guarantee shall be extended and valid for (30) days after the Commercial Operation Date.

(g) Completion Date: In the event that the Original Commercial Operation Date is extended due to any Excusable Delays, EPGE shall return the Performance Bank Guarantee to the Company on the Original Commercial Operation Date:

- (h)(i) After Commercial Operation Date, the Company shall pay for the electricity consumed from the grid for the purpose of operating the Gas Engines in accordance with the EPGE regulations.
- (i)(i) Within 14 days after the end of each month, the representatives of the Parties shall meet at the Site to determine the amount of electricity the Company cannot produce due to planned and forced outage of the power plant, system breakdown, transmission line fault, unavailablility of Gas Supply and other events. The representatives of the Parties shall record such determination in writing and sign on the same after the amount of electricity has been finalised.
- (j) In the event that the Company is liable for paying the Cost of Additional Gas pursuant to clause 3(b)(xiv), EPGE shall be entited to set off the Cost of Additional Gas against any payment payable to the Company.-
- (k) The Parties shall settle any take-or-pay at the end of each season. Any payment due to the <u>EPGE Parties</u> shall be adjusted to the energy payment in the following month. <u>Any payment due to the Company shall be made in accordance with Clause 4 (I).</u>
- (k)(1) EPGE shall send credit note to the Company for any penalty payment, incurred by the Company to EPGE including but not limited to the COD delay penalty pursuant to clause 3 (b) xiv, the Cost of Additional Gas pursuant to clause 3(b)(xii) and any take-or-pay pursuant to Annex 5. If there is no objection to the amount in credit note within five (5) business days of receipt of the relevant credit note, the amount shall be deemed as having been approved by the Company, and the Company shall pay the amount mentioned in the credit note by account transfer to EPGE's bank account within thirty (30) days from the date of receipt of such credit note. If the Company do not pay the amount mentioned in the credit note, EPGE shall be entitled to withhold



the energy payment. If any dispute arises on the amount mentioned in the credit note, the Company shall pay the undisputed amount, and the Parties shall negotiate settlement of the disputed amount.

- (I)(m) EPGE shall be entitled to retain 30% of the energy payment for the last month of the Term for a period of three months, which amount shall be released to the Company thereafter. EPGE shall be entitled to deduct any amount payable to EPGE by the Company from the foregoing retained amount.
- 5. The compensation for breach of the terms and condition contained in this Agreement.
 - (a) The Take or Pay shall be calculated based on seasonally in accordance with Annex 5.
 - (b) In the event of EPGE's system failure or total blackout, the Company shall restore full operation of the Gas Engines within twenty (20) minutes for any one of the Gas Engines upon receiving power from the national grid. If the Company shall fail to fulfill this obligation, it shall become the Default of the Company.
 - (c) Within forteen (14) days after the Commencement Date, the Company shall submit the work program to be carried out, failing to submit such program, the Company shall pay Myanmar Kyats 300,000 per day as penalty fees.

6. Term of the Agreement.

The term of this Agreement shall be effective from the date of signing of this Agreement and if the extension of the term or the termination of the term is not made in accordance with the terms and conditions of this Agreement, this Agreement shall be valid for sixty (60) months from the Commercial Operations Date.

If the term of this Agreement is agreed to be extended by both Parties and provided that EPGE shall provide a three (3) months' advance notice, the term shall be extended.

7. Title to Gas Engines and Equipment.

- (a) All the Gas Engines procured and owned by the Company in performing its obligations hereunder shall at all times be and remain, solely and exclusively the property of the Company, and no right, title or interest in any of the Gas Engines shall pass to EPGE or any third party at any time or under any circumstances under this Agreement. The Gas Engines are, and shall at all times remain, personal property, notwithstanding that the Gas Engines and related equipment and supplies or any part thereof may now be, or hereafter become, in any manner affixed or attached to any personal or real property located at the Site or otherwise. EPGE shall not exercise any right to or claim over the Gas Engines.
- (b) The Parties hereby confirm their intent that this Agreement shall constitute provision of required Scope of Services only and does not



constitute and shall not be characterized as an engine or equipment sale or financing transaction or other business investment or enterprise. The Parties are not anything other than that of power producer and purchaser, and a service provider and a customer, and the Parties do not intend in any manner to change or to impact the ownership of the Gas Engines and related equipment and supplies by the Company.

8. Defaults

- (a) EPGE shall be in default under this Agreement (an "EPGE Default") upon the occurrence of any of the following events:
 - i. The energy payment, unless disputed, is not paid within thirty (30) days from the date of the invoice,
 - ii. EPGE is in breach of any obligation for which this Agreement does not provide exclusive remedies; provided that: (A) the Company shall first have provided EPGE with written notice of the nature of such breach, and (B) EPGE shall have failed within forty-five (45) days after receipt of such notice (or such extended period as is mutually agreed) either (1) to commence to cure such breach and diligently thereafter to pursue such cure, or (2) to provide reasonable evidence that no such breach has occurred.
- (b) Upon the occurrence of any EPGE's Default, the Company may terminate this Agreement in accordance with Clause 9 of this agreement.
- (c) the Company shall be in default under this Agreement (an "Company Default") upon the occurrence of any of the following events:
 - i. Actual Heat Rate of the power plant exceeds more than five percent (5%) of the Net Guaranteed Heat Rate for more than three (3) aggregate months during the contract Term.
 - the Company failing to maintain the Net Guarantee Output more than one (1) month during the dry seasons unless such failure is caused by responding to EPGE's dispatch, or there is a reasonable excuse for such failure subject to EPGE's decision,
 - iii. the Company fails to comply with the applicable environmental laws of Myanmar during the term of the contract,
 - iv. the Company is in breach of any obligation for which this Agreement does not provide exclusive remedies, provided that:
 (A) EPGE shall first have provided the Company with written notice of the nature of such breach, and (B) the Company shall have failed within forty-five (45) days after receipt of such notice (or such extended period as is mutually agreed) either (1) to commence to cure such breach and diligently thereafter to pursue such cure, or (2) to provide reasonable evidence that no such breach has occurred.



- (d) Upon the occurrence of any Company Default, EPGE may terminate this Agreement in accordance with Clause 9 of this Agreement.
- 9. Termination
 - If this Agreement is terminated before the stipulated period forsixty (a) (60) months (as renewed hereunder) for any reason, EPGE shall remain obligated to pay the energy payment for the remaining period to the Company, subject to a maximum termination amount equal to the energy payment for a period of thirty six (36)] months. If the remaining period is less than thirty six (36) months, EPGE will only pay the energy payment for the remaining period. Such remaining amount shall be paid in a lump sum within thirty (30) business days after the termination of this Agreement.
 - (b) Subject to Clause 9(e), the Company shall not terminate this Agreement other than for EPGE Default.
 - (c) Subject to Clause 9(e), EPGE shall not terminate this Agreement other than for Company Default.
 - (d) In the event of EPGE Default or Company Default under Clause 8, the non-breaching party shall provide termination notice of a Default, after which, the breaching party shall have sixty (60) days to cure this Default before the non-breaching Party may exercise its right to terminate this Agreement.
 - (e) This agreement can be terminated if both Parties agreed mutually to terminate this agreement or if either party is being affected by any Force Majeure events for more than 180 days consecutively.

10. Remaining rights after termination of this Agreement.

All the rights and obligations of the Parties accrued prior to the expiration or termination of this Agreement and the confidentiality and indemnity provisions shall survive the expiration or termination of this Agreement. No other rights and obligations provided herein shall be effective after the expiration or termination of this Agreement.

11. Force Majeure.

- The term "Force Majeure" means restrictions of the Government (a) (political force majeure), natural earthquakes, fire, floods, storms, riots, water risk, strikes, war, lookouts, industrial disturbance, plagues, landslide, cyclone, lightning, explosion, civil unrest, blockades and any other causes which are beyond the reasonable control of either Party and which, notwithstanding the exercise of due care and diligence, cannot be overcome by either Party.
- (b) If either Party is temporarily rendered unable wholly or partly by Force Majeure to perform its duties or accept the performance by the other Party under this Agreement, it is agreed that the affected Party shall give notice to the other Party within fourteen (14) days after the occurrence of the cause relied upon, giving full particulars in writing of such Force Majeure. The duties of such Party as are affected by such



Force Majeure shall be suspended (except in the instance of Political Force Majeure (for clarity, "Political Force Majeure" shall mean: any act or omission by any governmental authority (including changes in laws but except lawful actions taken by any governmental authorities in response to acts or omissions of the Company or its employees, officers, contractors, servants or agents), which directly and adversely affects the performance of the Company of any of its obligations under this Agreement), in which case EPGE shall continue to pay the requisite energy payment)-during such period during the continuance of the disability so caused, provided that the Party affected shall as far as possible, within its control recover from the effects of such Force Majeure event with all reasonable dispatch.

(c) Neither Party shall be responsible for any delays, damage or loss caused by Force Majeure except for Political Force Majeure.

12. Excusable Delays.

The Company shall not have any liability to EPGE and shall not be considered to be in breach of any of its obligations under this Agreement for any delay in the commencement of commercial operation or any delay or failure in the performance of any obligation under this Agreement, to the extent that such delay (an "Excusable Delay") is a direct or indirect result of any of the following:

- (a) If this Agreement has not become effective within ninety (90) days from the Commencement Date by the reasons solely attributable to the EPGE;
- (b) Any delay in issuing any required permit, license or approval, for which EPGE is responsible and any delay in providing the required assistance to the Company in the course of obtaining the required permit, license or approval for which the Company is responsible;
- (c) EPGE fails to acquire the land area for the Site or the Ancillary Land, or make the Site or the Ancillary Land available on the Commencement Date and throughout the term or EPGE fails to comply with its other obligations with respect to the Site or the Ancillary Land (including the granting of access and use rights) according to Clause 3(a)(i);
- (d) EPGE fails to make available the natural gas as required hereunder according to Clause 3(a)(iii);
- (e) An occurrence of a Force Majeure event; or
- (f) Any other delay which cannot be solely attributed to the Company's default.

If there is an Excusable Delay resulting in a delay to the Original Commercial Operation Date, the Original Commercial Operation Date shall be extended for each day of the Excusable Delay.

13. Confidentiality

The Parties to this Agreement shall keep secret and confidential and shall not disclose the terms and conditions of this Agreement or any other confidential, financial or trading information relating to the other Parties during the term of



this Agreement and following the expiration or termination hereof, whether to their respective officers, directors, employees, agents, contractors, subcontractors or otherwise save (i) as expressly provided in this Agreement; (ii) with the prior consent of the other Party; (iii) for project financing purpose of the Company; or (iv) for information which are already in the public domain or in the possession of the receiving Party prior to its disclosure.

14. Representations and Warranties.

Each Party hereby warrants and represents to the other Party as follows:

- (a) It is duly registered in the jurisdiction of their address in the Preamble hereto, validly existing in such jurisdiction and has the power to execute this Agreement.
- (b) All of the formalities required by it consistent with its obligations (and subject to the other Party's obligations) for the conclusion and performance of this Agreement are complete and legally effective.
- (c) There is no judgment, ruling, verdict or administrative action from any court, arbitral tribunal, administrative intervention agency that substantially affects its performance of this Agreement when it is executed.
- (d) The internal authorization required by it to execute this Agreement has been completely obtained; the persons signing this Agreement are its legal or authorized representatives. This Agreement shall be legally binding upon it after becoming effective.

15. Amendments.

This Agreement shall not be amended, save with the written consent of both the Parties.

- 16. Transfer of Obligations.
 - (a) No Party shall transfer rights and obligations, wholly or partially, without the written consent of the other Party. If the transferor can prove that the proposed transferee has sufficient financial and technical capabilities to perform the rights and obligations under this Agreement, the non-transferring party shall not withhold or delay the provision of its consent to such transfer.
 - (b) For the purpose of financing the Project, the Company may, with due notification to EPGE, assign or create a security interest over its rights and interests under or pursuant to this Agreement, any project agreement, the Project, the moveable property, the intellectual property, the revenues or any other rights or assets of the Company.
 - (c) If EPGE decides to, with due notification, at any time during the term assign or otherwise transfer its rights or obligations under or pursuant to this agreement without the prior written consent of the Company to a restructured successor entity, provided that the restructured successor entity (i) if such entity has been established through a due process of law by the Government of the Republic of the Union of Myanmar and owned or controlled by the Government of the Republic



of the Union of Myanmar, (ii) or is an entity not owned or controlled by the Government of the Republic of the Union of Myanmar but which is capable of performing the obligations of EPGE under this Agreement, EPGE shall ensure the restructured successor entity shall fully undertake and perform the contractual obligations under this Power <u>PurchaseRental</u> Agreement which are originally undertaken and performed by EPGE. "

17. Mutual Agreement.

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This Agreement is made and executed in the English language only. Each Party retains one executed original counterpart both of which shall be deemed to be originals of this Agreement and shall be deemed as being one and the same.

This Agreement is for the benefit of the Parties herein and shall be binding on the successors and representatives of the Parties herein. This Agreement shall not be presumed to give rise to any responsibilities to third parties.

18. Indemnification.

Subject to the limitations set forth elsewhere in this Agreement, each Party (the "Indemnifying Party") shall indemnify and hold harmless the other Party (the "Indemnified Party") from and against any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, costs, expenses or disbursements (including all reasonable legal fees and expenses) of any kind and nature whatsoever that may at any time or times be imposed on, incurred by, or asserted against any Indemnified Party (whether or not also indemnified against by any other person) as a result of:

- (a) any breach by the Indemnifying Party of its obligations under this Agreement;
- (b) any breach by the Indemnifying Party of its representations and warranties under this Agreement; or
- (c) claims of any kind (including claims based on personal injury or property damages) asserted against an Indemnified Party by any third parties arising from any act or omission of the Indemnifying Party.

19. Waiver of Immunity.

To the extent that either Party may, in any jurisdiction, claim for itself or its assets immunity from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process, such Party agrees not to claim, and hereby waives, such immunity to the fullest extent permitted by the laws of that jurisdiction, intending in particular, but without limiting the generality of the foregoing, that this waiver shall apply in respect of any proceedings occurring in Myanmar.

20. Dispute Resolution.

Any dispute arising from this Agreement shall be resolved amicably through negotiation between the Parties. If resolution cannot be obtained in such manner within (30)days, resolution shall be sought through final and binding

arbitration. The arbitration proceedings shall be conducted in accordance with the UNCITRAL Arbitration rules in effect at the time when the arbitration proceedings are commenced and which are hereby incorporated by reference into this clause. The venue of arbitration shall be Yangon, Myanmar. The language of arbitration shall be English. Costs of arbitration shall be determined by the arbitral tribunal.

21. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the Republic of the Union of Myanmar, without regard to its principles of conflicts of law.

22. Guaranteed Technical Parameters of the Power Plant.

The Guaranteed Technical Parameters for Power Plant are provided at <u>Annex 8</u>.

23. Renegotiation.

In the event that any situation or condition arises due to circumstances not envisaged in this Agreement and warrants amendments to this Agreement, the Parties shall re-negotiate and make the necessary amendments.

24. Annexes

The Annexes attached to this Agreement are herby made an integral part of this Agreement.

The Annexes are:

- Annex 1 The Site
- Annex 2 Gas Specifications
- Annex 3 Dispatch Procedures
- Annex 4 Technical Specifications
- Annex 5 Payments and Tariffs
- Annex 6 Scope of Services
- Annex 7 Company's Designated Bank Account
- Annex 8 Guaranteed Technical Parameters for Power Plant
- Annex 9 Capability Comply with Regulation of Health and Safety
- Annex 10 Invoice format

24-25. Notices.

(a) Any notice or other communication in connection with this Agreement or with any arbitration under this Agreement shall be in writing in English (a "Notice") and shall be sufficiently given or served if delivered or sent:

Address	:	Building No.27,Naypyitaw, Myanmar
Email	:	hpgemd@moep.gov.mm
Facsimile	:	+95 67810 4292
Facsimile	:	+95 67810 4290
Attention	:	U Khin Maung Win

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		Managing Director
Copy to	:	U Han Zaw
		Chief Engineer, Thermal Power Department

In the case of the Company to:						
Address	:	No. 36, Theinphyu Road, Pazundaung Township, Yangon				
Email	:	maungkyay@national-infra.com				
Facsimile	:	+95 1200273				
Attention	:	U Maung Kyay				

Or (in either case) to such other address or fax number or email address as the relevant party may have notified to the other in writing in accordance with this clause.

(b) Any Notice may be delivered by hand or sent by fax. Without prejudice to the foregoing, any Notice shall conclusively be deemed to have been received the next business day, if sent by fax, or at the time of delivery, if delivered by hand or at the time of transmission. Email shall be used as information only.

The duly authorized representatives of each of the Parties have signed this Agreement at the place and on the date written above, and in the presence of witnesses.

[Remainder of page intentionally left blank; Signatures on following pages]

d.

For and on behalf of EPGE

For and on behalf of PowerGen Kyaukse Company Limited

U Khin Maung Win Managing Director

U Maung Kyay

[•]

<u>Witnesses</u>

General Manager Finance Department

Chief Engineer Thermal Power Department

[•]

[•]

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Annex 1 The Site & Intake Delivery Point



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Annex 2 Gas Specifications

SHWE Gas Composition

As attached

Gas Specification

SHWE Gas Composition

Component	Mole	BTU	Relative	
Name	Percent	Gross	Density	
C6 + 47/35/17	0.0199	1.05	0.0007	
PROPANE	0.0297	0,75	0.0005	
i- BUTANE	0.0109	0.36	0.0002	
n - BUTANE	32.2 PPM	0.11	0.0001	
i - PENTANE	49.7 PPM	0.2	0.0001	
n - PENTANE	0.0000	0.00	0.0000	
NITROGEN	0.2218	0.00	0.0021	
METHANE	99.5529	1007.81	0.5514	
CARBON DIOXIDE	0.0491	0.00	0.0007	
ETHANE	0.1073	1.9	0.0011	
TOTALS	100	1012.18	0.557	
Compressibility Factor (1	/7)@ 14.73000 PS	SIA & 60.0 DEC	G.F= 1.100198	
Base Pressures =		14.73		
Gross Dry BTU =	1014.19 Corrected/Z			
Real Relative Density G	as =	0.5578		

99.874

1357.91

Real Relative Density Gas = Un-normalized Mole Percent = WOBBE =

000

Annex 3 Dispatch Procedures

- 1. The Company acting through Company Personnel shall declare daily capacity available and required gas volume for dispatch twenty (24) hours ahead of the dispatch period ("Declared Capacity").
- 2. The Company acting through Company Personnel shall maintain a dispatch log detailing declared availability and nominated power production.
- 3. Under a day ahead dispatch regime, for each day EPGE shall nominate the required hourly power production from the Gas Engines for the next day ("Nominated Capacity"), and to the extent it is technically feasible for safe operation of the grid, EPGE shall nominate power in volumes to allow for optimal fuel consumption efficiency of the facility. This means, to the extent feasible, the dispatcher will nominate power in engine blocks which will allow each engine to operate at full load.
- 4. Should EPGE require adjustment to this dispatch schedule after their original nomination, the Company shall use its commercially reasonable efforts to amend the production schedule.
- 5. Communications between the Company and EPGE shall take place by phone and written correspondence. Phone and call charges shall be paid by the Company.
- 6. Prior to the Original Commercial Operation Date, the Parties shall agree on communications metering (electrical and natural gas) and protection settings procedures. Unless the Parties agree otherwise EPGE meter shall be used for billing purposes.
- 7. Should EPGE gives dispatch instruction to increase the number of the Gas Engines to be operated, the Company shall comply with the instruction within 20 minutes in respect of each Gas Engine.



Annex 4 Technical Specifications

- Gas Engines specification
- Plan layout drawing and single line diagram
- Gas pipeline infrastructure's specification and piping and instrumentation diagram

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0 GENERAL

0.1 EXECUTIVE SUMMARY

General

This technical specification provides the reader with the basic technical data required for an evaluation of the plant's technical features.

The proposed Modular power plant is designed and engineered in accordance with this technical specification.

The technical data stated in this document is for guidance and evaluation purposes only. Performance data and related reference conditions are separately stated in the supply contract documents.

The governing law and the procedures of dispute resolution for this technical specification, shall be as stipulated in the Agreement supply contract. If there is any discrepancy between the English version and a translated version of this technical specification, the English version shall prevail and have precedence over the translation.

Design and construction

The essence of the design is simplicity, safety and reliability.

The equipment is designed to prevent accidental contact with moving, hot or tensional parts and to minimise ingress of dust and dirt.

The structure and layout design of the power plant permits access to all parts for inspection, maintenance and repair.

Wärtsilä quality procedures and test & inspection procedures are applied to ensure product quality throughout the design and manufacturing process. Special attention is paid to the engine and auxiliary unit testing, as well as inspection and testing of the final installation.

Wärtsilä's quality and environmental management systems fulfil, and are certified according to, ISO 9001:2000 and ISO 14001:2004.

Main parts and devices like panels, valves, pumps, etc. are marked with engraved name plates indicating their item codes used in Wärtsilä documentation and manuals.

English is used in all documents, correspondence and nameplates.

SI units of measurement are used in all technical documents.

The design and manufacture of power plant equipment supplied by Wärtsilä is subject to constant review, and due to improvements and optimisation of materials, design and tooling techniques, manufactured equipment may be improved from the specification given below.



This information is confidential and proprietary to Wärtsilä.



Deviations to assumptions made in this specification

If the purchaser's requirements, local building codes, zoning requirements, Grid/Interconnection Study, Environmental Impact Assessment, Building Permit Application, Soil investigation, Topographical survey, Contamination evaluation or site Demolition requirements or other conditions deviate from the assumptions made herein and have an impact on Wärtsilä's scope of supply, the scope of work shall be reviewed, and the price adjusted accordingly.

Project Management and Engineering

The delivery of the Modular power plant will be managed by a dedicated project team, comprised of a project manager who has the overall responsibility for the delivery. The project manager is assisted by project engineers for the main technical disciplines.

The project team is the single point of contact with the purchaser's organisation, and has full authority to decide technical and commercial issues related to the project on behalf of Wärtsilä.



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0.2 TYPE OF PRODUCT

The proposed Modular power plant is designed for base load operation and is intended for power generation.

The system is designed for parallel operation with the public supply system.



The Modular power plant is designed to use Natural gas as the main fuel.





0.3 MAIN DATA AND CONDITIONS

Configuration

The Modular power plant is equipped with 9 engines of the W18V50SG engine type as the prime mover.

Main data and conditions gives the allowed operating range for the finalised Power Plant.

Design ambient temperature

Altitude above sea level Ambient air temperature	100 35	m ℃
Maximum ambient temperature	10	
Maximum ambient air temperature	40	°C
Minimum ambient temperature		
Minimum ambient air temperature Relative humidity at minimum ambient temperature	15 100	°C %





0.4 OPERATION MEDIA

General

To maintain the components and equipment of the Modular power plant in good operating condition, and to minimise wear and tear, it is of utmost importance that all operating media used are of good quality and within the specifications given by Wärtsilä.

Below are the main parameters for the major operating media of the Modular power plant. The complete specification and requirements for all the operating media needed are given in the Operation and Maintenance Manuals delivered for the Modular power plant.

Fuels

Wärtsilä engines are designed and developed for continuous operation on fuels with a quality within the recommended limits below. These values indicate the limits for the power plant and the individual limits for the engines. Fuels having one or several values close to this limit might have a negative impact on the performance and component lifetime.

Gas fuel

Parameter		Limit	Unit
Lower heating value (LHV) ¹ for system design Methane number ² , engine performance related Lower heating value (LHV) ³ , engine performance related	Minimum Minimum Minimum	38.0 80.0 30.0	MJ/m³N
Methane contents, CH ₄ Hydrogen sulphide, H ₂ S Total sulphur ⁴ Hydrogen, H ₂ Carbon dioxide Water and hydrocarbon condensates before the engine Ammonia Chlorine + Fluorines Particles or solids, content Particles or solids size Gas inlet temperature	Minimum Maximum Maximum Maximum Maximum Maximum Maximum Maximum Maximum/ Maximum/ Maximum/	70 0.05 5 3 20 Not Allowed 25 50 50 5 5 0 ⁵ / 50	voł -% vol -% mg/kg vol -% vol-% mg/m³ _N mg/m³ _N µm ²C

 1 Values given in $m^3{}_{\rm N}$ are at 0 °C and 101.3 kPa

² Methane number (MN) calculated according to EN 16726. Minimum value depends on the receiver temperature.

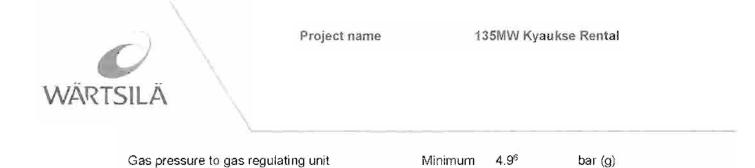
³ Values given in m³_N are at 0 °C and 101.3 kPa

⁴ Applies when CO catalyst is used

⁵ Minimum of 15°C above gas fuel dew point



This information is confidential and proprietary to Wartsilä.



Engine cooling water

Corrosion inhibiting additives must be used in the engine cooling water. Only additives of the brand and types approved by Wärtsilä are allowed to be used. The additive manufacturer's dosage, pH, and testing recommendations shall be followed.

If a nitrite-based corrosion inhibitor is used, the aim should be to keep a nitrite (NO2) content of approximately 1500 mg/l, calculated as nitrite. The pH shall be between 8.5 and 9.5.

The limits for engine cooling (primary circuit), turbine washing, and separator operating water must meet the following requirements:

pH at 25°C	>6.5	-
Conductivity at 25°C (limit for turbine	<100	mS/m
washing only) Total hardness Ca2+ + Mg2+ Silica as SiO₂	<10 <50	<i><i>ψ</i>, <i>ι</i></i>
Chlorides CI-	<80	mg/l
Sulphates as SO4 ²⁻	<150	mg/l

The general appearance should be clear, colourless, and free of undissolved materials.

Charge air

The highest allowed concentration of impurities at the charge air inlet is:

Chlorides (Cl-)	1.5	mg/Nm3 ⁷
Hydrogen Sulphide (H2S)	1.16 375	mass-ppm µg/Nm3
	0.25	volppm
Sulphur Dioxide (SO2)	1.25 0.43	mg/Nm3 volppm
Ammonia (NH₃)	94	mg/Nm3
Minimum filtration class	0.125 F5	volppm EN 779:2002

⁷ Nm3 given at 0 °C and 1013 mbar

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⁶ Dependent on the lower heating value (LHV) of the gas. Minimum pressure given at LHV minimum 36 MJ/m³_N, if LHV is lower, minimum required pressure will increase.



Lubricating oil

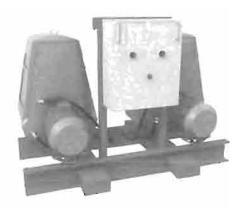
Only lubncants that are approved by Wartsilä are allowed to be used. The major lubricating oil suppliers have certain lubricating oils which are approved by Wärtsilä.

The properties of the fresh lubricating oil must meet the following requirements

Viscosity classSAE 40Viscosity Index (VI)Minimum95Sulphated Ash LevelMaximum0.6% massAlkalinity (BN)4 - 7mg KOH/g



Project name 135MW Kyaukse Rental





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0.6 CODES AND STANDARDS

The design complies with the following standards:

Mechanical systems

The mechanical systems are designed, manufactured, constructed and installed according to the appropriate extent of the following standards:

Description

- Engine test run
- Vibration
- Design
- Pipe design calculations
- Welding
- Stairs and platforms
- Dimensional standards for installation materials (pipes, beams, etc.)
- Vertical tanks
- Horizontal tanks
- Typical material standards

Code ISO 15550 except for the fuel consumption calculation, which is based on Wärtsilä's experience of this engine type. ISO 8528 part 9 EN 12100 EN 13480 and DIN 2413 EN 1011 ISO DIN, ISO, SFS and EN

API 650 or EN 14015 EN 12285, excluding nozzle location DIN, SFS and EN

Abbreviations

- DIN:German Standard (Deutsche Institute für Normung)EN:European StandardISO:The International Organization for StandardisationSFS:Finnish Standards Association
- API: American Petroleum Institute

Electrical systems

The electrical systems are designed, manufactured, constructed and installed to applicable parts according to the following standards:

Description

- Generator
- Transformer, oil-type
- Transformer, dry-type
- MV switchgear
- LV switchgear
- Enclosure protection
- WOIS workstation hardware
- WOIS workstation software
- Earthing network
- Control panels
- PLC software
- Lighting installation
- Fire detection
- Protection against lightning

Code IEC 60034 IEC 60076 IEC 60076 IEC 62271-200 or IEC 62271 IEC 61439-2 IEC 60529 IEC 60950 Applicable parts of VDE 3699 IEEE 80 IEC 60439-1 IEC 61131-3 IEC 60598 EN 54 IEC 62305

information is confidential and proprietary to Wärtsilä.





Abbreviations

IEC:	International Electrotechnical Commission
IEEE:	Institute of Electrical and Electronics Engineers
EN:	European Standard
VDE:	The Association for Electrical, Electronic & Information Technologies
WOIS	Wärtsilä Operator's Interface System









A POWER GENERATION EQUIPMENT

A1 GENERATING SET

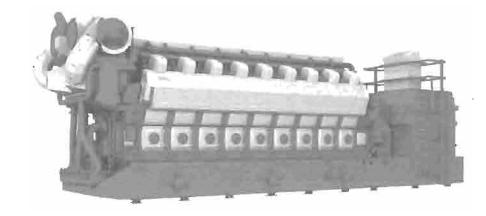


Figure 2 Example of a Wärtsilä 18V50SG generating set arrangement

The W18V50SG engine and generator are mounted on base frames. The base frames are flexibly mounted on a concrete foundation by means of steel springs.

The main dimensions of the W18V50SG generating set are8:

Length	18.781	m
Width	4.09	m
Height	6.02	m
Weight (dry)	364870	kg
Weight (wet)	379870	kġ

A1.1 ENGINE

Wärtsilä 18V50SG engine

General engine description

The Wärtsilä 50SG engine is a spark-ignited lean-burn gas engine. The engine works according to the Otto cycle. Gas is mixed with air before the inlet valves, and the gas-air mixture is compressed during the compression phase. Gas is also fed into a small pre-chamber, where the gas mixture is rich compared to the gas in the cylinder. At the end of the compression phase, a spark plug ignites the gas-air mixture in the pre-chamber. The flames from the nozzle of the pre-chamber ignite the gas-air mixture in the whole cylinder. After the working phase, the exhaust gas valves open, and the cylinder is emptied of exhaust gases. The intake air is turbocharged and intercooled.

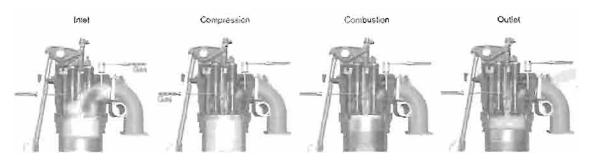
⁸ The dimensions and weight may vary depending on the generator make and type.

This information is confidential and proprietary to Wärtsila.



Due to a high degree of integrated functions on the engine, only a minimum amount of support from external systems is needed, thus minimising the interconnections to external systems. An embedded engine control system controls the combustion process individually in each cylinder.

The engine is designed for continuous operation on gas



The combustion process Figure 3

Engine main data

Configuration	V	
Number of cylinders	18	
Cylinder bore	500	mm
Stroke	580	mm
Speed	500	rpm
Mean effective pressure	22	kPa
Mean piston speed	9,67	m/s
Compression ratio	11.5:1	
Number of inlet valves	2	
Number of outlet valves	2	
Direction of rotation facing towards flywheel	Clockwise	

Engine block

The engine block is made of nodular cast iron and is cast in one piece; it incorporates the jacket water manifold and the camshaft bearing housings. The crankshaft is underslung-mounted on the engine block.

The bearing caps, also made of nodular cast iron are fixed from below by hydraulically tightened screws. They are laterally guided by the engine block both at the bottom and at the top. The horizontal side screws at the lower guiding are hydraulically tightened as well. Together this provides a very rigid crankshaft bearing. A combined flywheel/thrust bearing is located at the driving end of the engine.

The oil sump is of a light welded design, and mounted below the engine block. It is sealed by Orings.

Crankshaft

The crankshaft is made of high tensile steel, and forged in one piece. It is fully balanced to counteract bearing loads from eccentric masses. The high degree of balance results in an even and thick oil film for all bearings.





Connecting rod

The connecting rod is made of forged alloy steel and it is partially machined. All connecting rod bolts are hydraulically tightened. The gudgeon pin bearing is of tri-metal type. Oil is led to the gudgeon pin bearing and piston through a bore in the connecting rod. The connecting rod is of a three-piece design, which makes it possible to unmount the piston without opening the big end bearing.

Main bearings and big end bearings

The main bearings and the big end bearings are of tri-metal design, with a soft and thick running layer.

Cylinder liner

The cylinder liners are centrifugally cast from a special a loyed iron to create wear resistance and high strength. The top collar of the cylinder liner is provided with bore cooling for efficient control of the liner temperature. The liner is equipped with an anti-polishing ring at the top, to prevent bore polishing.

Piston

The piston is of composite type with a steel crown and a nodular cast skirt. The piston skirt and cylinder liner are lubricated by a unique piston skirt lubricating system. The piston top is cooled by the cooling gallery design. The piston ring grooves are hardened. The piston ring set consists of two compression rings and one spring-loaded oil scraper ring. The piston rings are located in the piston crown.

Cylinder head

The cylinder head is made of nodular cast iron, and it is fixed to the cylinder block/liner with hydraulically tightened bolts. Each cylinder head has two inlet and two exhaust valves; all valves are equipped with rotators. The exhaust valve seats are directly water cooled. The valve seat rings are made of specially alloyed iron with good wear resistance.

Camshaft and valve mechanism

The cams are integrated in the drop-forged shaft material. The journal bearings consist of separate pieces, which are fitted to the camshaft pieces by flange connections. This solution makes it possible to remove individual cylinder camshaft pieces sideways. The camshaft bearing housings are integrated in the engine block casting. The camshaft is driven from the crankshaft through a fully integrated gear train.

Fuel gas admission system

On the engine, the fuel gas is supplied through common pipes along the engine, and continues with individual feed pipes to each main gas admission valve. There are two common pipes per bank, one for the main gas, and one for the pre-chamber gas supply. The gas pressure in both lines is controlled separately and there is a filter before every gas admission valve.

The main fuel gas is mixed with the intake air before the inlet valve in the cylinder head. Since the gas valve is timed independently of the inlet valve, scavenging of the cylinder takes place without a risk that unburned gas escapes directly from the inlet side to the exhaust side.

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The gas admission system is dynamically controlled to maintain the required load and speed. The quantity of main fuel gas admitted to each cylinder is constantly controlled with the combustion pressure and temperature by means of individual gas admission valves for each cylinder.

The main fuel gas admission valves function as the engine speed regulator, and the valves control the amount of gas fed to each cylinder of the engine. Each cylinder is equipped with its own fuel gas admission valve. The valve is located on the cylinder head manifold and the gas is fed into the inlet channel of the cylinder head. The main gas valve is a direct actuated solenoid valve. It is possible to adjust the amount of gas fed to the individual cylinders with the engine automation system when the engine is running.

The **pre-chamber** gas control valve is mechanically actuated by the inlet valve yoke, which is directly driven by the camshaft/push rod. It takes care of the gas admission to the pre-chamber. The valve is located in the pre-chamber, and the amount of injected gas is controlled by the gas pressure.

The **pre-chamber** is the ignition source for the main fuel charge. The pre-chamber is optimised to give the best possible ignition, with rapid and repeatable combustion.

Ignition system

An ignition module located on top of each cylinder head cover contains the ignition coil. The module is connected to the spark plug with a high-voltage extension. The spark plug is a high-energy type, specially manufactured for use in gas engines. The spark plug is located in the prechamber, and the timing for the spark is controlled by the engine control system.

Lubricating oil system

The engine has a wet oil sump system. The system lubricates the main bearings and the cylinder liners in the engine. Oil is led through bores in the engine block, and heads to other lubricating points like the camshaft bearings, the rocker arm bearings and the valve mechanism gear wheel bearings. The turbochargers are also connected to the engine lubricating system. Furthermore, the lubricating oil is also cools the piston crowns.

The lubricating oil system built on the engine comprises the following equipment:

- Pipes made of steel
- Oil sump of wet type, equipped with a low-level switch connected to the engine automation system
- Main lubricating pump equipped with an overflow valve. The pump is of screw type
- Start-up/running-in filters in the oil inlet line to each main bearing. These are removed after the engine is commissioned

Starting Air System

The engine is started with compressed air, with a nominal pressure of 30 bar. The start is performed by directing air into the cylinders through starting air valves in the cylinder heads. The starting system includes a slow turning system, which directs a few engine revolutions in the beginning of the starting sequence, as a safety check.

The starting air system built on the engine comprises the following equipment:

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- Pipes made of steel
- Starting air master valve, electrically and manually operated
- Start blocking valve to prevent starting when turning gear is engaged
- Starting air distributor
- Starting air valves in A-bank cylinder heads
- Slow turning device
- Flame arrestors

Cooling water system description

The engine is cooled by a closed circuit cooling water system, divided into a high temperature (HT) circuit and a low temperature (LT) circuit.

Thermostatic valves control the LT water inlet, and HT water outlet temperatures. The cooling water is cooled in a separate cooler in the external cooling water system.

The engines are equipped with a two-stage charge air cooling system. The cooler is built onto the engine.

The engine cooling water system is comprised of the following equipment:

- Pipes made of steel
- Engine-driven circulating water pump for the low temperature cooling circuit
- Engine-driven circulating water pump for the high temperature cooling circuit
- Non-return valves after the circulating pumps

Charge air system

The compressor side of the turbocharger feeds air into the cylinders through the charge air cooler and the charge air receiver. The engine is equipped with one turbocharger per cylinder bank. The turbocharger is of the axial turbine type.

The engine charge air system comprises the following equipment:

- Compressor on the turbochargers
- First stage charge air cooler
- Second stage charge air cooler
- Fresh water cleaning device for the compressor

Exhaust gas system

The engine mounted Mono-SPEX (Single Pipe Exhaust system) gas pipes, made of cast iron, with separate sections for two pairs of cylinders. Stainless steel bellows are installed between the sections to absorb heat expansion, and the pipes are fixed by brackets. The engine exhaust gas pipes are fully covered by an insulation box. There are sensors for remote measuring of the temperature after each cylinder, and on both sides of the turbochargers.

The exhaust gas system comprises the following equipment:

- Mono-SPEX system manifold with believes
- Flexibly mounted insulation box
- Turbine on the turbocharger
- Fresh water cleaning device for the turbine

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Turbocharger and air-fuel ratio control system

To maintain a correct air-fuel ratio, the engine is equipped with an exhaust gas wastegate. It keeps the air pressure in the receiver at an optimal level to match the best power output with the emission requirements.

The exhaust gas wastegate valve by-passes the exhaust gases past the turbocharger. The wastegate valve works as a regulator and adjusts the air-fuel ratio to the correct value, independent of variations in the site conditions, such as ambient temperature, humidity and altitude.

The wastegate valve is actuated by compressed air and controlled by the engine control system.

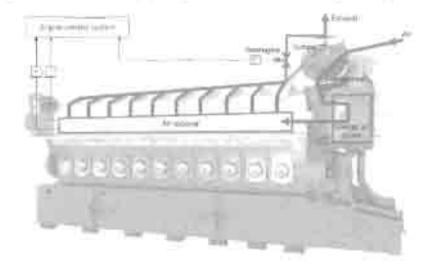


Figure 4 Illustration showing the charge air and exhaust gas system

Wartsila Engine Automation

The engine automation system is a completely embedded management system. The engine control system is a distributed and bus-based system where the monitoring and control function is placed close to the point of measurement and control. In this way, both the on- and off-engine wring is significantly simplified. Advanced diagnostics and control functions provide outstanding performance, and the need for systems outside the engine is significantly reduced.

For the field bus interconnection, Wartsilä is committed to open standards. The physical interface of the engine control system is a standard Ethernet connection for general process data, to both the WOIS workstation (Wartsila Operator's Interface System) and the PLC systems. The system meets even the highest requirements on reliability, with selective redundancy and fault-tolerant design.

The gas admission duration is dynamically controlled by the internal speed controller, to obtain pre-set speed or load reference levels. The quantity of main gas admitted to each cylinder is controlled by cylinder-individual gas admission valves, which are actuated by the CCM cylinder control modules. The amount of gas admitted depends on the gas supply pressure and the time the main gas solenoid valve is open (duration).

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Project name



High Pmax control strategy is the primary method to adjust the duration of cylinder-specific gas admission.

Hardware of the engine automation system

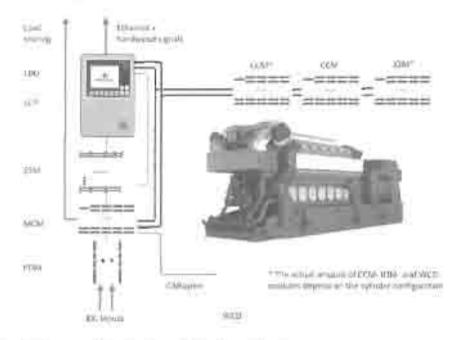


Figure 5 Hardware of the engine automation system

The engine automation system comprises the following main equipment:

- ESM safety module
- LDU graphical display for complete on-engine monitoring and communication interface to the plant automation system.
- MCM main controller for speed governing, start/stop sequencing and overall engine management
- IOM I/O modules for distributed data acquisition
- CCM cylinder control modules for injector/gas valve control and real-time diagnostics.
- · IPDM distributes, filters, and handles fusing of power supply
- WCD Ignition system module
- Sensars
- Actuators & valves

The automation system handles the following major tasks and functions.

- Local interface to the operator, including a local display which indicates all important engine measurements, an hour-counter, and a local control panel.
- Engine start/stop management, including start block handling and slow turning, load reduction, wastegate control, and the LT/HT thermostatic valve control.
- Engine safety (alarms, shut-downs, emergency stops, load reductions) including hardwired safety for engine overspeed, lube oil pressure, cooling water temperature, and external shut-downs.
- Electronic speed/load control with various operation modes.

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Sensors for alarm and monitoring

One set of sensors fitted on the engine, which are connected to the external engine control system.

Other included Items

- Flywheel with fixing bolts
- Electric motor-driven turning device
- Counter flanges for pipe connection
- Crankcase safety relief valves with a flame trap
- The engine has one coat of priming paint and one coat of finishing paint

Engine base frame

The engine is rigidly mounted on the engine base frame. The base frame is a rigid welded steel box construction. The engine part and generator part of the common base frame is bolted together at site to form one rigid base frame.

Flexible connections between engine and external piping

To minimise the transmission of engine vibrations to the plant's piping systems, flexible hoses and bellows are provided for installation between the generating set and external piping systems.

Flexible connections are supplied for the following auxiliary systems:

- Starting/control air
- Cooling water
- Lubricating oil
- Exhaust gas
- Fuel
- Crankcase ventilation

Generator base frame

The generator is rigidly mounted on the generator base frame. The frame is made of welded steel.

The generator part and the engine part of the common base frame are bolted together on-site to form one rigid base frame.

Set steel springs

Steel spring type vibration isolation units are installed between the common base frame and the concrete foundation block. The number of steel spring units for each type of generating set is determined by the weight of the generating set and an analysis of the natural frequency of the rigid body. A fitting plate is installed between the common base frame and the steel spring packages to adjust to the level of the surface of the foundation block.

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Engine maintenance platform - prefabricated

Partly prefabricated maintenance platforms are provided for easy maintenance and access to the engine. To minimise vibrations, the platforms and stairs are freestanding on the floor and not connected to the engine.

A1.2 GENERATOR

Generator - 11000 V

Generator type

The generator is of the synchronous, three-phase, brushless, salient pole type.

Generator main data

Generator apparent power	23019	kVA
Rated power factor	0.8	
Nominal voltage	11000	V
Rated current (In)	1208	A
Voltage adjustment range	±5	%
Frequency	50	Hz
Speed	500	Rpm
Continuous short-circuit	>2.5 x In	
current		
Insulation class	F	
Temperature rise stator	F	
Temperature itse rotor	F	
Cooling method	Air cooled	
Enclosure	IP23	
Standard	IEC60034	

Generator construction

The generator is designed to operate together with a reciprocating engine. The stator frame is constructed with a rigid welded steel structure. The stator core is built of thin electric steel sheet laminations. The rotor consists of a shaft and salient pole type main revolving field.

The generator achieves very high efficiency because of the exceptional thermal conductivity created by the tight fit between the coils and the stator core.

Terminals

The six stator winding ends are brought to terminal boxes on the generator sides. Terminals for monitoring and aux mary equipment have separate terminal boxes.

Damper winding



The generator is provided with a damper winding for parallel operation with other generators and with a separate power grid, if so connected.



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Shaft and bearing

The generator is horizontally mounted and provided with two sleeve bearings. The generator rotor is designed to minimise the effect of torsion rotor oscillations due to system disturbances and rapid load changes.

Excitation

The exciter is of the brushless type with a rotating armature/rectifier assembled on the same shaft as the main generator rotating armature. The exciter field is controlled by the automatic voltage regulator (AVR). The rectifiers are of the silicon diode type in a full wave bridge arrangement. The rotating armature and stationary field of the exciter are insulated with Class F materials.

Cooling (air-cooled)

The generator is air-cooled. A fan mounted on the generator shaft takes cooling air from the engine hall, through washable filters, and passes it through the generator.

Automatic voltage regulator

The voltage regulator is a completely solid state type for control of generator voltage by means of controlling the exciter field. The regulator controls the generator exciter field as required to maintain a constant and stable generator output voltage. (The AVR is installed in the generating set control panel).

Voltage regulation accuracy	± 0.5	%
- within power range	0 – 100	%
- within speed range	95 – 105	%
Voltage setting range	90 – 110	%

Accessories

The following accessories are included with the generator:

- 6 PT-100 elements in stator windings
- 2 PT-100 elements for bearings
- 1 Anti-condensation heater
- 1 Voltage transformer for excitation power and measurement
- 1 Current transformer for measurement
- 3 Current transformers for protection

Flexible coupling



A flexible coupling is used between the engine flywheel and the generator which transmits the torque from the engine to the generator. By using a flexible coupling, the crankshaft is not loaded by any external bending forces. The elements in the coupling are made of radially arranged steel spring packs.



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Flywheel cover

A flywheel cover is installed over the flywheel and flexible coupling to prevent access to the rotating equipment during operation.

A2 MECHANICAL AUXILIARY SYSTEMS

Proper function of the Modular power plant depends on the mechanical auxiliary systems. The proposed systems have been optimised for this particular application. The function of these systems is to provide the engine with fuel, lubricating oil, starting air, cooling water, and charge air, of the required quantity and quality, as well as to dispose of exhaust gases in a proper manner.

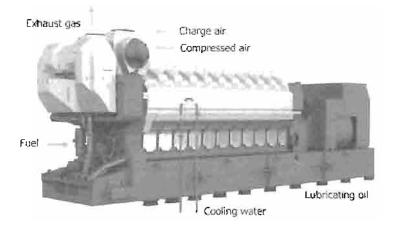


Figure 6 Mechanical auxiliary systems for the engine

A2.1 AUXILIARY MODULES

To ensure installation quality and reduce erection time, Wärtsilä has developed prefabricated auxiliary modules. These modules contain several pieces of auxiliary equipment. This saves significant pipefitting and installation time on-site. The complete module is pressure- and function-tested, then flushed, painted, and corrosion-protected prior to shipment. All external connection points are sealed and covered with steel plates.

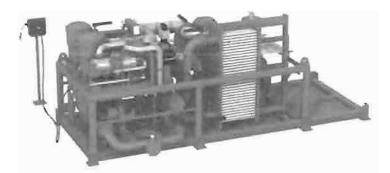
Engine auxiliary module

The Engine auxiliary module include several pieces of auxiliary equipment (listed below), and handles the flow of lubricating oil, cooling water and compressed air to and from the engine. The Engine auxiliary module is installed in the front end of the engine with flexible pipe connections.

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The Engine auxiliary module includes the following main equipment:

- 1 Turbo cleaning water supply
- 1 Lubricating oil heat exchanger
- 1 Lubricating oil automatic filter
- 1 Pre-lubricating oil pump
- 1 Lubricating oil thermostatic valve
- 1 High temperature circuit preheating unit
- 1 Low temperature thermostatic valve
- 1 High temperature thermostatic valve
- 1 Auxiliary module panel
- 1 Set piping
- 1 Set valves and gauges





Exhaust gas module

The exhaust gas module includes the auxiliary equipment listed below, and handles the flow of charge air to the engine, and exhaust gas from the engine.



Figure 8 Illustration of a typical exhaust gas module

The exhaust gas module includes the following main equipment:

- 1 Low temperature circuit expansion vessel
- 2 Charge air silencer
- 1 Exhaust gas branch pipe
- 1 Exhaust gas ventilation fan

Pipe rack

The pipe rack connects the auxiliary systems of different generating sets to each other.

Engine auxiliary module platform

A2.2 FUEL SYSTEM

The fuel system provides the engine(s) with fuel of the correct flow, pressure and degree of purity.

A2.2.6 Gas system

The purpose of the fuel gas system is to supply the engine with a constant gas feed of suitable pressure, temperature, and cleanness. It should also shut off the gas supply if any problem arises, and provide ventⁿation of trapped gas.

The power plant is designed for continuous operation on gas, and the gas system is designed for the agreed project gas fuel quality specified in Section 0.4



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The gas fuel system consists of the following equipment:

Main safety shut off valve - engine specific

The main safety shut off valve unit isolates the gas system in case of an emergency, and the unit is located on the gas linet pipe outside the engine hall.

- 1 Pneumatically operated shut-off valve 1
 - Manually operated shut-off valve

Gas regulating unit

Each engine is equipped with a gas regulating unit which controls the gas feed pressure to the engine depending on the engine load. The gas regulating unit performs a leakage test of the main shut-off valves after every engine stop or shut-down. There is a separate pressure control line for the gas delivered to the prechamber.

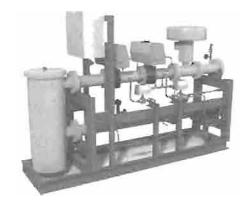


Figure 9 Example of a gas regulating unit

The following components are built onto a steel frame:

Gas filter Manual and automatic vent valves Control valve(s) Instrumentation

Flow meter for gas regulating unit

The gas regulating unit is equipped with a mass flow meter. The meter has an accuracy of 0.5 % at full load.

A2.3 LUBRICATING OIL SYSTEM

The lubricating oil system provides required lubrication for all moving parts on the engine. It consists of the engine's lubricating oil system, which handles the cooling and filtration of the



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lubricating oil for the engine itself, and the plant-related lubricating oil system, which handles storage of new and used lubricating oil.

The tubricating oil system consists of the following equipment:

1 Lubricating oil transfer pump - stationary

The transfer pump unit pumps lubricating oil from the storage tank to the engines when topping up or changing oil. The transfer pumps and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The transfer pump unit consists of the following equipment.

2 Electric motor-driven transfer pumps

Pressure

2 bar

Single strainer on pump suction side Thermometer on pump suction side Local control panel Set of interconnection pipes, flanges, seals and valves

Lubricating oil transfer pump mobile

The transfer pump unit pumps lubricating oil to and from the engine when topping up or changing oil, or transfers oil to and from drums as needed. The transfer pumps and auxiliary equipment are built on a wheeled dolly.

Electric motor-driven transfer pump	
Capacity 8.1 m ³ /h	
Pressure 2 bar	
Single strainers on pump suction side	
Thermometer on pump suction side	
Local control panel	
Wheeled dolly	
Set of interconnection pipes, flanges, seals and valves	

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Figure 10 Example of a mobile lubricating oil transfer pump unit

Oil mist separator

Lubricating oil heat exchanger (mounted on the Engine auxiliary module)

The lubricating oil heat exchanger is of plate-and-frame type.

Lubricating oil automatic filter (mounted on the Engine auxiliary module)

The automatic lubricating oil filter is of the self-cleaning type. The cleaning is done by automatic back-flushing. The flushed oil is led to the engine sump.

Pre-lubricating oil pump (mounted on the Engine auxiliary module)

Before the engine is started the complete oil system must be filled and the engine adequately primed by the pre-lubricating pump. The pre-lubricating pump is an electric motor-driven pump equipped with a built-on relief valve.

Lubricating oil thermostatic valve (mounted on the Engine auxiliary module)

The thermostatic valve controls the oil temperature to obtain the right temperature before entering the engine.

A2.4 COMPRESSED AIR SYSTEM

Compressed air is produced by a starting air compressor unit and stored in starting air bottles, while instrument air of higher quality is produced in an instrument air compressor unit.

The pressure equipment is designed, manufactured and tested according to the European Union directive 97/23/EC "Pressure Equipment Directive".

The compressed air system consists of the following equipment:

2 Instrument air compressor unit

The instrument air compressor unit produces control, instrument and working air. The compressed air is stored in the built-on air bottle until it is distributed to the different consumers.

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The following components are built onto a steel frame, which forms a compact skid unit:

Electric motor-driven air compressor		
Capacity, each	162	m³/h
Pressure	7	bar
Compressed air receiver		
Volume	0.2	m³
Refrigerated air dryer with control panel		
Dew point	+4	°C
Filter for removal of oil, water and particles		
Common control panel		
Set of interconnection pipes, flanges, seals and valv	res	

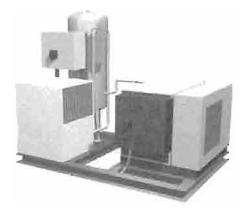


Figure 11 Example of an instrument air compressor unit

1 Starting air compressor unit - single

The starting air compressor units are sized to fill the starting air bottle(s) with the required air for 19 start attempts per total amount of engines in 60 minutes. The starting air compressor and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The starting air compressor unit consists of the following equipment:

Electric motor-driven air compressor Capacity 185 m³/h Pressure 30 bar Pressure switches for starting and stopping the air compressor (24/30 bar) Alarm switch for too-low starting air pressure to engine (18 bar) Oil and water separators Control centres for manual and automatic operation Pressure reduction valves for control and working air (30/6 bar) Set of interconnection pipes, flanges, seals and valves

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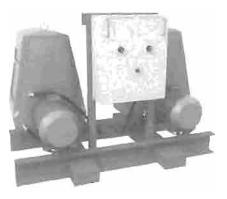
Figure 12 Example of a single starting air compressor unit

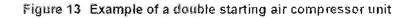
1 Starting air compressor unit - double

The starting air compressor units are sized to fill the starting air bottle(s) with the required air for 19 start attempts per total amount of engines in 60 minutes. One compressor is in stand-by. The starting air compressors and auxiliary equipment are built on a steel frame, which forms a compact skid unit.

The starting air compressor unit consists of the following equipment:

	Electric motor-driven air compressors; working		
1	Capacity	185	m³/հ
	Pressure	30	bar
	Electric motor-driven air compressor: in stand-by		
1	Capacity	185	m³/h
	Pressure	30	bar
	Pressure switches for starting and stopping the air	compre	essor (24/30 bar)
	Alarm switches for too-low starting air pressure to	engine	(18 bar)
	Oil and water separators		
	 Control centres for manual and automatic operatio 		
Pressure reduction valves for control and working air (30/6 bar)			∂ bar)
	Set of interconnection pipes, flanges, seals and va	lves	





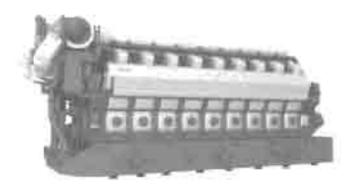
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WÄRTSILÄ

Wärtsilä 50SG Engine generating set PRODUCT LEAFLET

TECHNICAL DATA

Oylinder pointgürations	UJV.
Cytinder tione	500 mmi.
Platon stroka	580 mm
Speed	500 rpm (50 Hz) 618 rpm (50 Hz)
Brake mean offective pressure	22 bar
Mean piston speed	9.7 m/s (50 Hz) 10 m/s (60 Hz)



RATED ELECTRICAL POWER (kW)

Generating set type	50 Hz	60 Hz
18V505G	18440	08880
18V50SG with turbegenerator	1869K)	19130



GENERAL CONDITIONS

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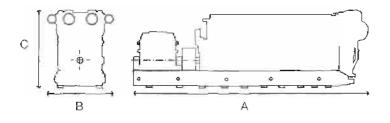
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DIMENSIONS (MM) AND WEIGHTS (TONNES)

Generating set type	Lengih (A)	Width (B)	Height (C)	Dry weight +/- 5%	Reduced transportation weight +/- 5%
18V50SG	18781	4090	6020	365	210

W. NELLAR, N.



- The issted dimensions of generating set ani maximum transportation dimensions, excluding the spring mounted shock apsorbers and turboonargen intel conts for V engines.
 Generating set dry weight includes spring-mounted shock apsorbers and intel conts, excludes tube or and cooling fluids.
- In case of limitations in maximum allowed transport weight, the generating set can be further disassembled for separate shoment of angine, generator and common baseframe. The listed reduced transportation weight is the weight of the heaviest of these parts. Please contact Wartsils in case transport weight needs to be further reduced.

DISCLAIMER

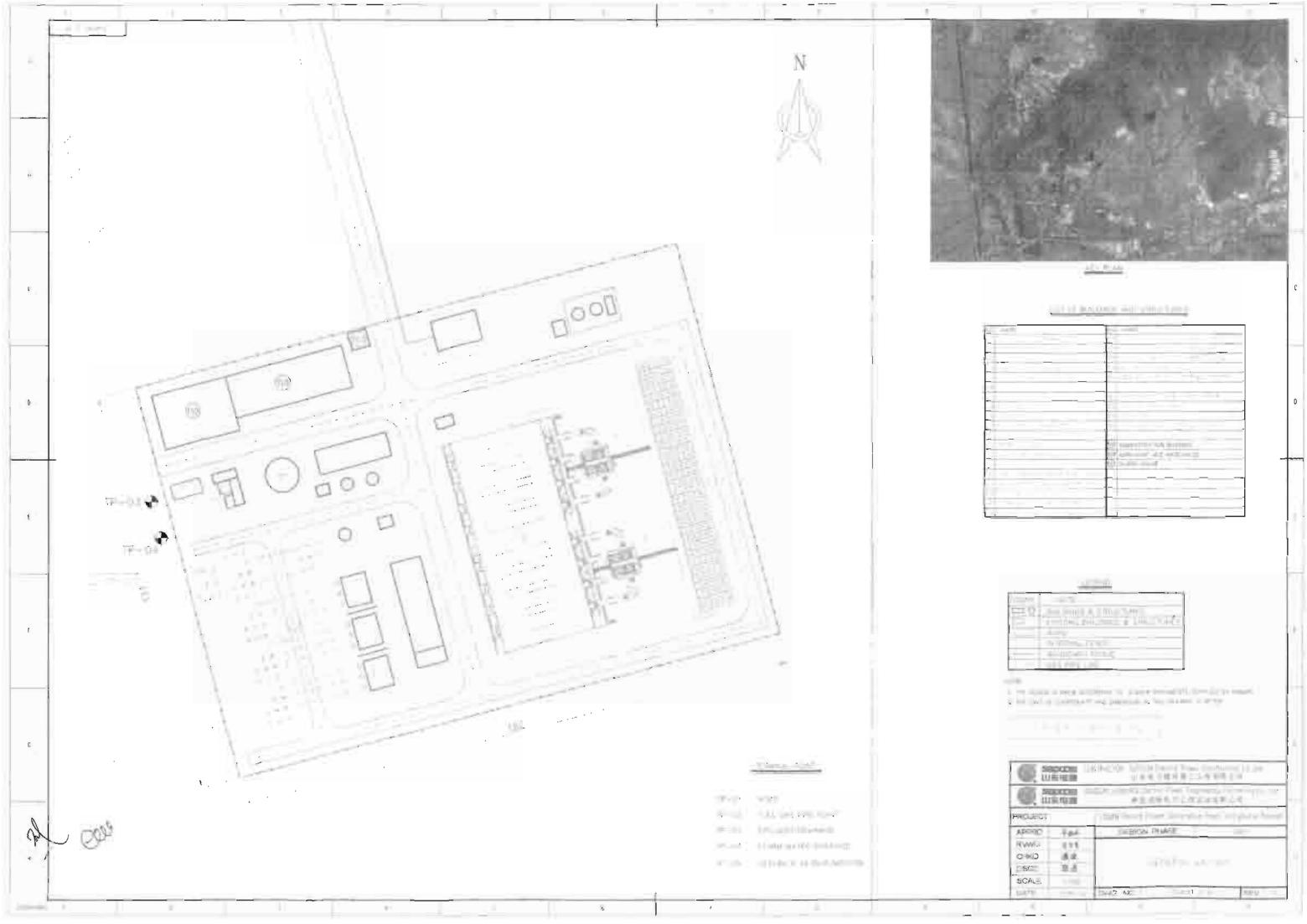
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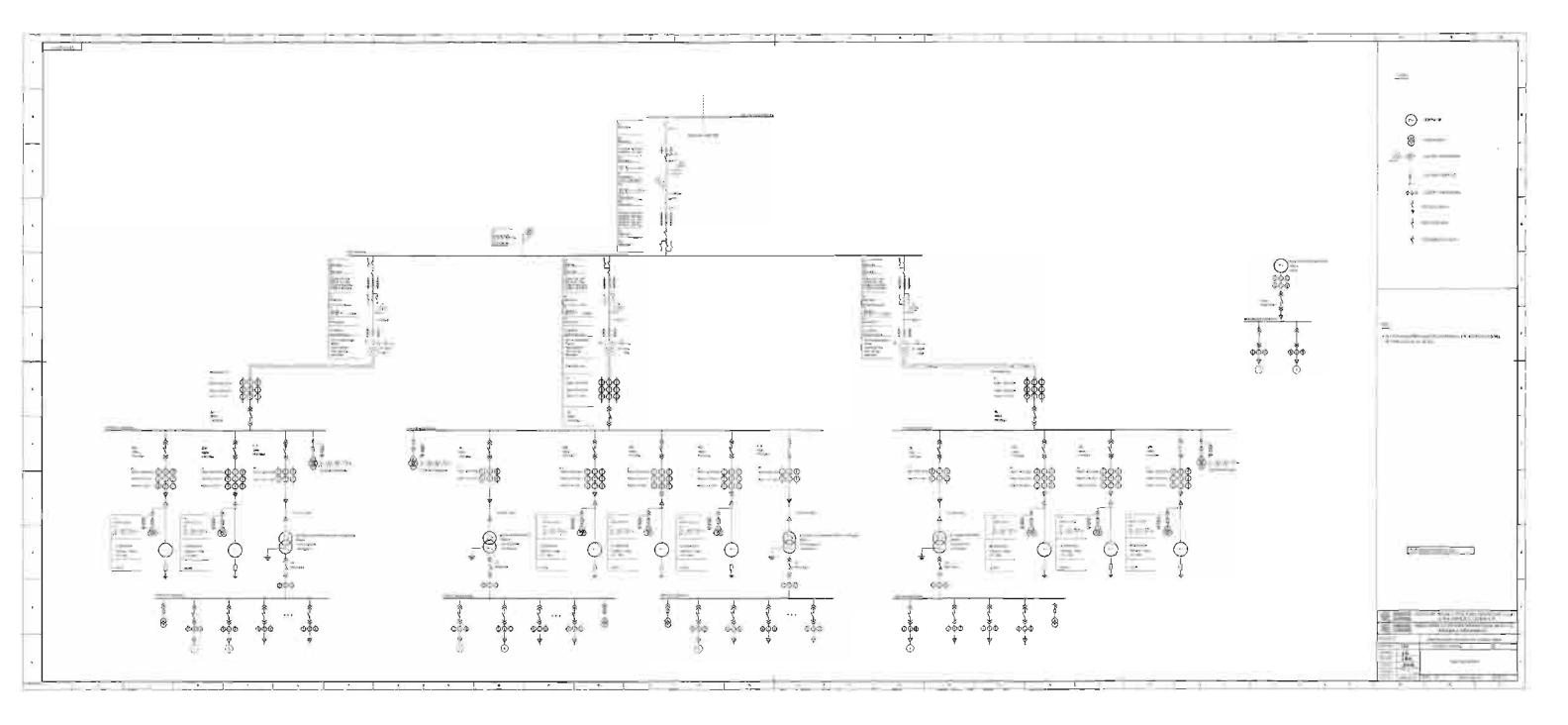




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New Gas Pipeline for new Rental Power Generation Plant in Kyaukse Region

Materials list and estimated cost for 4.85 miles of a new 10 inches gas pipeline from SEAGP Off-take to the site for the power plant

Sr.N o	Description	Q	uty	Rate (US\$)	Total (US\$)
1	10"Φ PE Coated Linepipe	7805	Meter	65.25	509276.25
2	Heat Shrinkable Sleeve	25	Rolls	331	8275
3	Closure Patches	700	Nos	1	700
		0.118	Ton	1779	209.922
4	16011 Electrode 3.2 mm	(_8	Pkt(15 k	g))	4
	16011 Electrode 4.0 mm	0.354	Топ	1715	607.11
	1.0011 Electrode 420 milit	(24	Pk1(15 k	g))	
5	10" Φ Steel Ball Valve (ANSI 600 Class)	3	Set	6120	18360
6	Pipe Fittings(45*, 90*)	1	Lot	13555.5	13555.5
	TOTAL				550983.782

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SECTION - IV

Technical Specification for 10" ERWAPI 5L Grade X-42 3LPEcoated Steel Line Pipes

FII-MINO.	DESCRIPTION	UNIT OTTY
TTT SU SVZ.	LAC INTERVIS	Cash Quin

I. 10" ERW API 5L Grade X-42 MS 3 Layer PE Coated Line Pipe (PSL 2)MTR = 7810

Reference Standards

- 1 API 51 Specifications for Line Pipe (Latest Edition)
- International Standard ISO 3183 (2nd Edition: Steel Pipe for Pipeline Transportation Systems
- 3. NACE TM 0284 : 2011
- 4. Hardness Testing on Parent metal, HAZ and weld Zone AS FM E92
- 5. Fensile Testing ASTM A370
- 6. PS1/2 pipe ordered for Sour Service. Annex H of ISO 3183(APU5L)

NOTE: Unless otherwise specified in this document, please follow API 5L latest edition.

- 1. PIPE
- (a) Pipe Size

1.	Nominal Dia	10 in
2.	Outside Dia	10.75 in
3	Wall Thickness	0.438 in
4	Linear Weight	48.28 lb/ft
5.	Mill test pressure	2910 psi (min 10s)

(b) General Requirement

The pipes shall be furnished with plain ends beveled to an angle of 30 degrees -5-0 degree with a root face $1/16^{\circ} \pm 1/32^{\circ}$ and shall be supplied with metallic bevel protectors and water proof cloth attached on both ends of each pipe.

(c) Usage

The Pipes shall be used in natural gas transmission pipeline for Mild Sour Services.

(d) Special Requirement

The Steel mill shall have the experience of manufacturing of Sour Service Steel and shall have world class laboratories itself to perform HIC test according to NACE TM 0284 in solution A or B.

HIC test certificates from the previous projects endorsed or certified by the official laboratories or Third Party Inspector must be submitted by the pipe manufacturertogether with technical tender documents. Failure to submit this certificate will lead to therejection.

2. Material

(a) All pipes manufactured to this specification shall be made by either the basic oxygen orthe electric are furnace process, fully killed and fine grained (Grain size 9 or finer as in ASTM E

112).

OOP

- (b) Pipe sizel grade shall bothermo-mechanical polled or thermo-mechanical formed with L290 XIS OR 02-42 MS.
- La y & Transmith & Alling and Lang

All pipes shall be manufactured from steel which shall have a chemical composition ensuring proper ductility strength toughness and weld ability under all conventional welding process and techniques.

The supplier shall provide hear analysis and surry not product the year for allspectred chemical elements. Those chemical Compositions shall be included in millicertificates.

Heat and Product analysis shall meas the following requirements -

Ele	content:		mas wt 1%
£	Carbon		0.1
1111	Miniganese		1.33
7.	Silicon		1).45
4	Phosphorum		0.02
3.5	Sulpina	0:003	
1.6.	Copper		0.35
To	Nichium		0.65
$\overline{\mathbf{N}}$	Mol Duenum		0.1
$\overline{\mathcal{M}}_{1}$	Chiomann		0.2
10	Naaadium		0.05
- û	Transum		0.04

Total % of Nb+V - Fi+Cu+Mo+ Cr ≤ 10.5.

CEpcin = C + Si/30 - Mn/20 + Cu/20 = Ni/60 = Cr/20 + Mo/15 - V/10 + 5B≤ 0.20

(d) Mechanical Properties.

(i) Lensde Strength

The finished pipes shall meet the requirements stated in table below forensile supported

Steel Grade	Yield Strength (psi)	Tensile Strength (psi)	Ratio (unaximoni)	Elongation	Minimum Tensile Strength of Weld Seam of 111/W pipe (pid)
8-42 MS	42100-71800	A0200-95000	0.43	As per API 5L	60200

(iii) Handuess Jest



Hurdness testing on the parent metalHAZ and Wolds shall be performed by using Vicker's test method in accordance with ASTM E 92 and shall be = 250 HV 10.



Hill HIC Test

(III) user dual his married out before production of pipel in a medium complying with NACE TM 0285, solution (A) or (B).

The test for resistance to HW shall meet the following acceptance criteria, with each ratio being the maximum permissible average for three sections periest specimen when tested in solution (A) or (B).

- (a) Crack Seasitivity ratio (CSR) ≤ 2 %
- (b) Crack Length ratio (CLR) ≤ 15 %.
- (c) Crack Unickness ratio (CTR) ≤ 5%
- (it) UVN Test

The test temperature shall be 0°C and the required minimum overage absorbedenergy

 based on full size specimens shall be 27.1 for transverse specimen 41.3 for longitudinal specimens.

(e) Inspection Frequencies

St. No.	Type of Inspection	Type of Pipe	Frequency of Inspection
Ĩ.	Flardness Test	HI W	Once per test unit of not more than 50
20	Pipe Diameter and out of roundness for pipe	HPW	Once per test unit not more than 20 length of the pipes
£:	H.I.C. Test		Once for each of the first three heats. Apply there after one test of each test unit of not more than 10 heats of steel

3. Pipe Manufacturing Process (HFERW)

Pipe shall be produced by using High Frequency Electric Resistance Welding process. The electric welding shell be performed by efficient power supply with a minimum welder frequency of 150 kHz and the weld seam and the entire HAZ shall be heat treated properly The welding system shall have an integrated control in which the following data, as minimum shall be mentioned.

10 fune	(ii) Welding Speed
(inv), urrent and Voltage	(iv) Welding a conperature
(v) Heat Treatment Tempenture	

The quality of the longitudinal weld shall be such as to produce weld joint efficiency of 1.9.

To be sure fitness and squareness of plate edges of the plates to be welded and to decrease the forming defects such as edge quality only onge forming process shall be acceptable for pipe diameter larger than 6 lach.

4. Expansion of Pipes

Pipe shall not be calif expanded for HFERW pipes.

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5. Residual Magnetism

As a minimum four readings shall be taken approximately 90° upart around the circumference of each of the pipe. The average of 4 readings shall not exceed 30 gauss and no one reading shall exceed 35 gauss when measured with a Hall-offect gauss meter.

6. Welding Procedure Qualification Test(WPQT)

WPO1 test shall be conducted at mill before pipe manufacturing mentioning WPS that includes properties of welding wire flux and how to preheat flux. So of flux reused, welding current, voltage, welding speed.gap design before welding etc.

7. Folerances

For diameter expect the endi pipe (ody)	± 0.0075 D
For diamater at pipe end	= 0.005 D
Out of roundness	0.015 D
Wall thick desi	± 0.1 1

8. Unit Longth (Fixed Longth Only)

Pipes shall be supplied in length of $12.20 \text{ m} \pm 0.60 \text{ m}$. No nine shall be shorter than 11.6 m.

9. External Coating of Pipe

The manufactured pipe shall be could with 3 layer polyethylene coating having total thickness 15.00 micross 15.00 micross (2.5 mm) on pipe material and 2.500 micross (2.5 mm) ± 0.1 mm) on welding scam. Cut took length shall be 100 ± 10 mm between coating ends and pipe ends. After application of coatings, the finished coating shall have the following properties.

Test	Unit	Acceptance Criteria	Test Method
Tensile Strength	MPa	≥ 17	ASTM D638
Breaking Eloogation	36	2.500	
C=thodic dishandment (24h/65±3°C/3.5 v)	mm	≤ 7 (radius)	CAN/CSA-Z 245.21-06
Impact Resistance (23± 2°C)	J/mm	2.5	Din 30670
Holiday detection	λ.V	2.25	CAN/CSA-Z 245 21-06
Peel adhesion(20%)	N	⇒ 150	CAN/CSA-Z 245 21-06
Vicat Softening Point	=.C?	⇒150	ASTM D1525
Brittleness Temperature	-C	-0,5	ASTM DI 525
Floxibility		No crasking of PE	CANFCSA-2 245-20-06



The coating mill shall have the laboratory to conduct on line checking and measurements. Checking of coating after 100% finishing of all pipes is unacceptable.

10. Weiding Procedure Qualification Test (WFQT) and Weldability Test

WPQT and Weidability. Lest shall be conducted at mill before manufacturing and strength test reports shall be submitted to intender.

11. Mill Certificate:

Mill / era fentes shall includ, the followings-

- (1) the number with reference to heat number.
- (2) Mechanicul 4cst (et ults and Chemical analysis including CU (Curbon Equivalent) with reference to pipe number.
- (3) Dimensional inspection
- 13 ND1 performed and results.
- y = HIC Lea and Reputts.
- (6) Lettilicate number and date of issue-

12. Marking of Pipes

Stencrups shall be made at inside surface of both pipe ends as follows. Marking may be madein a sequence convention to and shall include the following minimum information.

- Purchase sname
- Pinchase order na.
- Steel Grade --- OD x t (Outside diameter x) wall thickness)
- Heat number
- Pipe number
- Pipe lenuth

13. Requirement of Third Party Inspection

Manufacturing process, quality control process and manufactured products of both seel milland pipe mill mustbe inspected and certificated by reputable third party inspection second the hidder's expense.

14. Right of Intender to InspectPipe Mill

- (i) Before manufacturing the intender has the right to check and inspect quality control system and storage system of nov materials and manufacturing process of pipe and creating mill by 3 engines is (Boy of's side)at the expense of thebidder, together with ^{out} party inspection term, and if it does not meet the requirements as per tender, the Player will cancel this under
- (ii) While many lettering: the internary also has the right to inspect daily pipe production at pipe nulls by the inspection team(larger's side)from the size to the real of pipe production by the expense of manufactures or bidder.

(iii)Pipe mill shall produce all pipe for the Boyer continuously, the expense for Boyer unspectors shall cover daily allowance, meal and accommodation lies.

15. Requirement of Mill Test Certificate

Mill test certificates for mechanical and chemical properties, HIC test and NDT test results approved by third partymust be sent along with manufactured pipes. Otherwise, those pipes will be rejected.

16. Required Document for Bidding

The following documents shall be contained in the bidding as a minimum:

- (a) I wo sets of technical proposal, one original and one copy(With CD Soft copy)
- (b) Company Profile (Original) of manufacturer mentioping:
 - (i) Capacity of mill showing major manufacturing equipments
 - (ii) In-house capability of manufacturing both pipe and coating
 - (iii) Valid API 5L Certificate (allowed the Annex H)
 - (iv) Valid Quality Management System Certificate, ISO 9001 or DNV
- (c) Manufacturing Process showing
 - (i) Pipe manufacturing process specification and procedure for HF ERW line
 - (ii) Coating process specification and procedures
 - (iii) Inspection and Test Pian and acceptance criteria, inspection frequencies and inspection method for both of pipe manufacturing and pipe coating.
 - (iv) HIC test procedure and sample report from previous project
- (d) Letter of Authorization (Original), duly stamped and signed, if the bidder is not the manufacturer.

17. Transportation of Pipe by Sea

(1) The contractor shall follow API SLW (Recommended Practice of Transportation on Barge and marine vessels).

- (2) Using of closed type container is unacceptable.
- (3) Using of top-open type container with extremely care not to damage the coating is acceptable.
- (4) It is preferable to have an owned sea port to reduce the coating defects and minimize the Joading time as much on possible.

18. Pipes Transfer to Jetty

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The bidder should accountlish all the pipes to arrive MOGE Jetty (Tharketa Offshore Base) without damage their will meet MOGE's acceptable conditions. These transportation costs will be borne by the bidder.



- 1% Notice to the Didders
 - (1) The proposal shall be prepared and submitted in accordance with the requirements set forthin this document. The proposal shall be completed with documents mentioned in No. 16 above as a minimum.
 - (2) The purposal must be boundarid mentioned clearly section by section
 - (3) Any proposal which does not comply with the above mentioned technical specification and lack of any of the required documents shall be considered as technical failure and will be rejected.

20. Delivery Schedule

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120 days or 4 months from the effective contract Date.

Dee

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SPECIFICATION FOR WELDING ELECTRODES(E 6011)

ITEM	DESC	RIPTIONS	QTTY	UNIT
١.	WELDING ELECTRODE			
	Manual Arc Welding Electro	des for laying natural gas pipeline		
	(API 5L. Grade X-42 to 65)			
			l.	
	Electrodes conforming to a			
	Brand Name	Lincoln EASYARC TM ID6011		
	Country of Original	Indonesia		
	Coating	High Cellulose Electrode		
	Welding Current/Position	DCEP, DCEN, ALL POSITION		
	Tensile Strength	62000 to 70000 psi		
Ē	Yield Strength	48000 to 64000 psi	0	
	Elongation	22 ~ 30 %	1	
Ť	Charpy V-Notch Toughness	20 - 53 ft-1b at -30 deg. C		
	Container Type	15 Kg easy open can		
		(Airtight sealed metal container)		
I	(a) Electrode Size	3.2 mm(1 / 8 inch)	120	KG
1	(b) Electrode Size	4.0 mm(5 / 32 inch)	360	KG
2.	Delivery			
	120 days from the Contract I	Date		
3.	Distribution Letter from Selle	r or Manufacturer		
	(Mentioning together with tee	hnical information needed)		
	Note:			
	(a) Container must be air seal	ed type metal box. Paper cartons		
	are not acceptable and the	n tender will be rejected.		
	(b)Electrode identification an	d operating data (AWS number,		
	Lincoln Label. Lincoln tra	demark) should be presented on		
0	every electroce.			1
gh /				
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SPECIFICATION FOR HEAT SHRINKABLE SLEEVE AND CLOSURE PATCHES

No.	DESCRIPT	RIN	A/U	QTTY
1	Heat Shrinkable Sleeve (Size 11" x 100 ft	1	NMB	25
	To apply field joint coatings for 10" API 51. Grade X-42.3 LPE (PSE 3)			ROLLS
	linepipe girth welds having 1500 microins thickness of 3 LPE coating, cut tack			
	length of 3"(75 mm)to 4"(100 mm) for onshor			
	THE REPORT OF COMPARING CONTRACTOR OF A DESCRIPTION	nec WPC100M		
	(A) Covalence WP1 100M-11x100/1.4-1.6-R1	Г. 		
	(B) Specifications			
	(1) Maximum Uperating temperature	+ 80 deg - C		
	(2) Min, prehent recoveration	= 98+100 deg_C		
	(3) Peol to seed (ASTMCD+1000 Std)	- 42 lb/m/g 23 deg t		
	The Impact Revisioner (ASIM G. 14)	= 2.85 m-tu		ň.
	(5) Programmin Resistance	- No boliday # 10 kV		
		V 65 (by) C		
	(6) Product Trackness	- 3 mm() 4-1.6)		
2	Chisure Patches (4" x 12")		NMB	700
	Closure patches to be used together with heat shrinkable sleeves			NOS
	mentional there			
	Chosing Patch - Crivalence W	PC P		
	(A) Covalence WPC100M-IV-4 x 12			
	Note: :			
	To provide all technical data related to the pool	uct (Brand name, model mimber,	15	
	type size, prehent insperance, sperating tempe	moture, procedure, esc.)		
	clearly in the proposal document. Any provo-al	just copied to this tender		
	specification will be rejected		0	±1
3	Distribution Letter from Seller or Manufact	uter		
	(Mention together with the ischnical informatic	n (secolad)		
4	Delivery			
	20 days from the contract date.			
	× =		4	
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SPECIFICATION FOR STEEL BALL VALVES AND PIPE FIFTINGS.

Ni	Description	A/1.	Qir
1	API 6 D Standard Steel Ball Valves (ANSI 600 Class)	1	
	Brand Name - [KVC(UK), Cameron (USA), Bohmer (Germany) DHV(USA) Brands Only		
	Country of Original - UK (USA / Germany		
	as Munufacturing standards	0	
- 1	APLOD Specification for pipeline valves		
	APL 607 Specification for fire testing of valves	0	
- 1	API 598 Nalve Inspection and (est		
	API Spec Q1 Specification for Quality Program		
	API of A multification for fire test for subset	N	
- 1	ASME B 16.5 Storpipe flanges and flanged fittings		
	ASMIT B 16:10 Face to Face and End to End dimensions	1.	
	ASM, B. 6.23 Buie Welding Lads		
- 1	ASMI: B 16.14 Valves- flanged, threaded and welding ends	i f	
	NACL MR 01-75 Supplide stress crecking resistant methic materials		
	for or field equipments	2	
1	ISO 14373 Specification for pipeline valves		
	ISO 9001 Quality Management System Requirements		
i	b) Full Hous (Pregable value)		
	c) Type of Critishingtion - Transon Mounted and thiss pieces bolted construction.		
- 11	d) Type of Face - Raised Tace with metal woven gasket type		
	e) Valve Body Material - Carnon Steel		
- 11	f) Body / Cap seal = Graphite range	1 0	
	a) Ball Freed steel with ENP		
- 81	b) Stem - to be inanafactured separately from the bull and in		
0	corporate O Rings, Graphite Rings and Anti-static device		
÷	 Operating type — Reduction Gear operated. 		
	 Section: investigation system - Standard 	- 3	
a,	 Independent main with incloaded springs. 		
Ċ	 Opstration (spin — Minimal, reduction warm gear oper to it 		
k	(a) Ball Position indicator - When in place on value, the year box value position		
	indicator shall be directly associator with actual		
	stem/port pasilion.		
l.	 Page to Face dimension — Shall comply with API 6D. 		
1	of Contain Pace Uninformer - Raised Face 2/16 arch		
	250 AARH (0.3 micron)		

COSA.

150			Dissemption	88)	. U/03
	191	Impection	 XII values must be 100% cisually inspected as just XPI 598 and MSS SP 55. 		
	(a)	Pressure Tests	 Shall indergo pressure tests in accordance with the requirements of API 6D and APJ 598. Spot Testing' is not incagnified regai pressure gas chosure test must be done. 		
	(1) 	Acceptance Criteria	 High pressure hydrostatic seat test leakage rates comply with API 6D Leakage rate for high pressure gas closure test shall not be preater than 0.5 SCC/cm dia.⁷ minute. 		
	151	Test Confilicate	 Fire test periodicate according to 1SO 10497-5 or API 6 FA. Pressue test certificate according to API 598. 		
	iir.	To privide the follow	ings that must be recommended by the latter form the above		
	1	STATE STATE STATE	nufacturer for each ball valve -		
		2 nos hut welding	neck companion flanges		
		2 nus Spinn wissen	metal gaskets		
- 11		2 sets of stud bolts	and mits for both ends		
		with material AS	TM A 193 B77 ASTM A 194 Gr 24		
		I im hammer type i	offset ring spanner		
		i sets of Scalaut In	rection goin		
		6 up of Soulant			
	άō	DOCUMENT TO P	ROVIDE		
h		1. Chemical & Meel 2. API Cemiliano	nanical Material Test Certificates according to BS EN 10204		
- 1		3. Fire Sale Cardier	ite according to API 607 and API 6FA		
		of the Supplied Pr component are br or any similar kin	nation from Original Manufacturer for the statement oduct for both Main Component as well as to all other and new, free from relibrication or reconstruction or rebuild d of actions. [Letter must address to Myanma Oil and Gas Driginal Manufacturer]	x	
		 If Supplier is not troin relevant Mail Warrenty Docume 			
		*** 1, 3, 4 & 6 with	ndves. 2 & 5 in bidding documents		
	<u>7</u> .	Note:			
5		Design, model noum	ber, drawing, and valve data sheet should be provided in		
		proposal. Any offer j	ost copy to MOGE render specification will be rejected.		

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SPECIFICATION FOR STEEL BALL VALVE AND PIPE FITTINGS.

6 D Standard Steel 6	all Valves		
		1 1	i
Wranish "Namite	[KVGUK],Cameron (USA),Bohmer (Germany)		
	DHV(USA) Brands Unity		
Country of Original -	104 - AUSA - Germany		
10 " Steel, Ball Values		PAR	3
Naminal diameter	= 10 inch		
Promune enting	ANSE600 Cho		
End Connections	Flange end - Raised Face		
Bolt buies	- 10 nes for 1 1 5 ° stud betts		
Note why Each valve must	be completed with companion flanges, gaskets, bolts	4	
nuts and other necessories r	doubly mentioned to above chuse (f).	0	
		0	
	Country of Original – <u>10 * Steel Ball Valves</u> Nominal diameter Prossure enting End Connections Bolt holes Note *** Each valve must	DHV(USA) Brands Only Country of Original - UL-/ USA Germany <u>10 * Steel Ball Values</u> Nominal diameter - 10 meh Provision enting - ANSU600 Chi-l End Connections - Flance-end - Raised Face	DHV(USA) Brands Only Country of Original - 1/4 / USA Germany <u>10 * Steel Ball Valves</u> PAR Nominal diameter + 10 meh Prosince enting + ANSU600 Cho End Connections + Flance end - Raised Face Bolt holes + 16 mes for + 151 * suid bolts Note *** Ench valve must be completed with companion flanges, gaskets, bolts

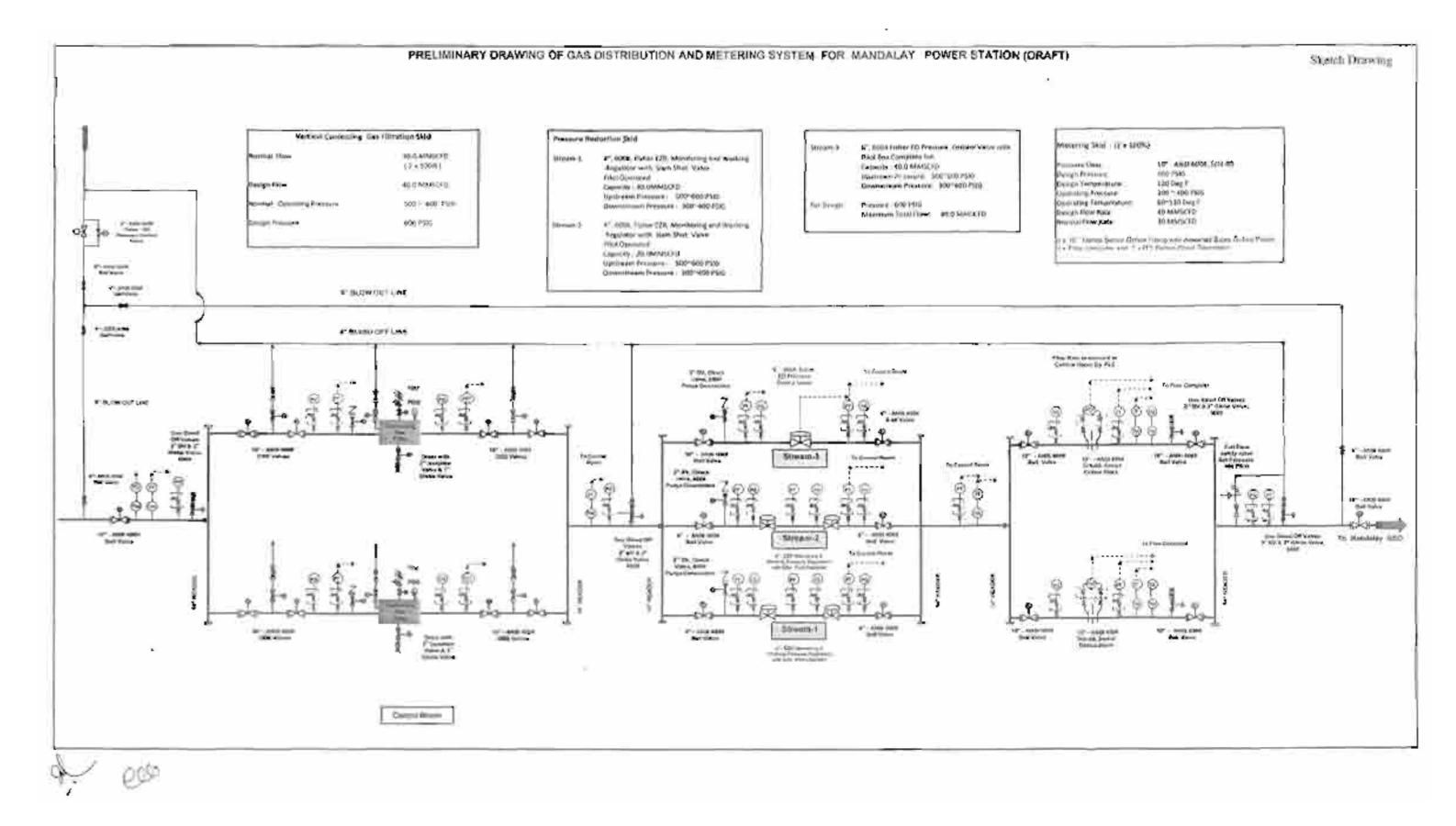
A 600

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	Sr Na.	Description	A/I/	Qtt
(Super built soliding) A 234 WPE B 16.9 Seamless Wall Thickness: 9.438 Inch (a) 10° 45 Degree Elbow (1 D Radius) NMB 24 (h) 10° 90 Degree Elbow (1 D Radius) NMB 10 2 Distribution Letter from Selfer or Manufacturer NMB 10 3 Manufacatter Name - With Methodal adormation needed as Drowing or Design) 10 4 Country of Original - 5 Delivery	a	Pipe Fittings(10 Inch Elbow)		
Wall Thickness: 9.438 Inch NMB 24 (a) 10" 45 Degree Elbow (1 D Radion) NMB 10 (b) 10" 90 Degree Elbow (1 D Radion) NMB 10 1 Distribution Latter from Seller or Manufacturer NMB 10 2 Distribution Latter from Seller or Manufacturer NMB 10 3 Manufacutrer Name - With Metronomy it's Profile Catalongs of Design () 10 4 Country of Original - 10 5 Delivery 10		Forge Steel, Compatible to 10" ERW API SI 8 42 31 PF Coated Steel Line Pipe		
(a) 10* 45 Degree Elbow (1D Radius) NMB 24 (b) 10* 90 Degree Elbow (1D Radius) NMB 10 2 Distribution Letter from Seller or Manufacturge (Mention legither with the technical information needed in Drowing or Design) 10 3 Manufacutrer Name - With Memoring its Profile Catalongs or Design) 10 4 Country of Original - 10 5 Delivery 10	- 1	(Sheet burt soliding) A 234 WPB B (6.9 Seamless		
(h): TO* 90 Degree: Elbow (3 D Radius). NMB 10 2 Distribution Letter from Seller or Manufacturer (Mention legather with the technical adormation needed as Drowing or Design.) 10 3 Manufacutrer Name - With Mentioning (* Profile Cutatings of Design.) 10 4 Country of Original - 10 5 Delivery 10		Wall Thickness: 9.438 Inch		
 Distribution Letter from Seller or Manufacturer (Mention legisther with the technical information needed a: Drowing or Design.) Maaufacutrer Nume - With Mentioning it's Profile. Catalongs or Broucher. Country of Original - Delivery. 		(a) 10" 45 Degree Ethow (2 D Radion)	NMB	24
(Mention legather with the technical accountion needed a Drowing or Design) Manufacutrer Name - With Mentioning it's Profile Catalongs or Broucher Country of Original - Delivery		(h) 10° 90 Degree Elbow (1 D Radius)	NMB	10
 Manufacutrer Name - With Meanoning it's Profile Catalungs of Brougher Country of Original - Delivery 	1	Distribution Letter from Seller or Manufacturer		
4 Country of Original - 5 Delivery		(Mention together with the technical information needed as Drawing, or Design)		
5 Delivery	3	Manufacutrer Name - With Mennoning it's Profile Catalongs of Broucher		
	A	Country of Original -		
C2D stups a favous the constraint state	.9	Delivery		
		120 stups a forces the constraint affects		

SPECIFICATION FOR PIPE FITTINGS

Delivery Date - 120 Days or 4 Months



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No	DESCRIPTION	QTTY	UNIT	UNIT PRICE	COST USS
	Vertical Coalescing Gas Filtration Skid:	2	Sets		
	Pressure Rating. ANSI 600#				
	Iniet Pressure (Normal) 500-600 PSIG				
-	Flow Rale (for one set) 30.0 MMSCFD @ 550 PSI				
	Shall Dia (OU) 32 inches, Element Model, FG-336				
	Quantity for Filter Elements of each vessel at least 12 Nes of 5 micron / 10 micron of Filter Cartholges				
_				1	
	Filter Vessel intet Line				
	10" Holation BV, Trunion Mounted, ANSI 600#, RF, WE cliw Stud Bolts & Nuts	1	set		
	Temperature Gauge with Proce 8 Thermowell	1	set		
	Temperature Transmitter, with Probe & Thermovell, Connext to Control room	3	set		
	- 0-1000 PSi Pressure gaugs with 1/2" Neadle valve & Bleed valve	1 1	set		
	- Gas Bleed off Valve with 2" x one Mono block BV And 2" x one Globe Valve ANSI 600#, RF, WE	1	36!		
	Each Coalescing Gas Filter Skid consists of the followings, but not limited				
1	14° Inlet Header for Gas Fatration Stod	1	No	350,000	350.000
	- Filter Intet 10" Trunion Mounted BVs Double Block & Bloeds (2 BVs & Bloed), ANSI 600# RF, WE	1	set	2000,0000	
1	- 0-1006 PSI Pressure gauge with 1/2" Naedie valve & Bleed valve	1	set		
	Pressure Transmitter connected to Control room	1 1	set		
	- Purge Connection 2' BV & Check Valve				
	- Coalescand Gas Filter Vassel with COC and safety interlock, dw	1	Isa		
	Temperature Safety Valver TSV Jow isolation valve, EGEIT, RF, WE	1	Bet	2	
- 1	- Liquid Drain with one 2" isolation BV and one 1" Globe Valve	1 1	set		
-	- Calue Drain with one 2 Isosand By and one Globe Valve , 600%, RF, WE	1	sat		
				1	
	Pressure Differential Transmitter o/w instrument isolation valves connected to Control room	1 1	set		
_	- Pressure Differential Gauge of Visiolation valves	1	set		
	- Friter Quilet 10" Trunion Mounted BVs Double Block & Bleeds (Z BVs & Bleed). ANSI 600#, RF, WE	1	set		
	- 14" Outlet Heador for Gas Pillration Skid	1	No		
_	Filter Vessel Outlet Line				
_	Temperature Transmitter with Probe & Thermowell, Connect to control room	1	set		
	- 0-1000 PSI Pressure gauge with 1/2" Needid valve & Bleed valve	1	sei		
	- Gas Blees off valve with one BV and one Globe Valve 800#. RF, WE	1	set	0	
1	Additional Spares	1	Lot		
-1					
2	Pressure Reduction Skid	1	83		
	INLET Pressure: 500~600 PSIG				
	OUTLET Pressure: 300-400 PSIG				
- 1	14 ⁻ Inlet Header for Pressure Reduction Silva	1	No		
2.0	Stream-1, Flow Capacity: 20 MIMSCFD				
_					
	-Wide Open Monitoring System c/w		-		
	- S* - ANS/ SOO# Trunnion mounted infer Isolation BV, RF, WE with gasket, stud bolts & nots	1	aat	1	
-	Purge Connection 2" BV & Check Vsive, ANSI 600#	1	Set		
-	Pressure Transmitter connected to Control room	3	set		
_	- 0~1000 PSI Pressure gauge with 1/2" Needle valve & Steed valve	3	set	l.	
	- 4' Emerson EZR Pilot Operated Monitor Pressure Reducing Regulator complete with pilot, filter, ANSI 600#, RF,	2	10.5		
	WE diw Pilot, to step down the pressure from 500~600 to 300-400. PSIG with Stam Shut Valve	2	Sete	14	
	- Pilot & Pilot Springe, Mara Disphragm as spare	2	sets each		
	- 6" - ANSI 600# Trunnion mounted Outlet Isolation BY, RF, WE with gasket, stud boits & nuts	1	set		
- 1					
20	Stream-2, Flow Capacity: 20 MMSCFD				
	Wide Open Monitoring System diw		1		
	- 6" - ANSI 600# Trunnion mounted injet isolation BV, RF, WE with gasket, stud bolts & nuts	1	set		
-	- Purge Connection 2" BV & Crieck Valve , ANSI 800#		set	and and and	
-1	Pressure Transmitter concertent to Control ream	3	set	500,000	500,00
-1	O-1000 PSI Pressure gauge with 1/2* Needle valve & Bland valve	3	set		
-1		2	Set		
	-4" Emerson EZR Pilot Operated Monitor Pressure Reducing Regulator complete with pilot, filter, ANSI 600W, RF, WE c/w Pilot, to step down the pressure from 500-600 to 300-400 PSIG with Siam Shut Valve	2	sets	1	
_					
-	- Pitol & Pilot Springs, Main Diuphragni as spare	2	sets each		
-	E" - ANSI 600# Trunnion mounted Outlet Isolation BV, RF, WE with geskid, stud bolts & multi	1	set		
.				1	
2.0	Stream-3, Flow Capacity: 30 MMSCFD		1.000		
-	 T0" - ANSI 6009 Transign mounted inlet Isolation BV, RF, WE with gasket, stud bolts & nutl. 	1-	545		
1	- Purge Connection 2" BV & Check Valve, ANSI 600#	1	: 56(
	- Pressure Transmitter connected to Flow Transmitter Control room	2	sets.		
	- D-1000 PSI Pressure gouge with 1/2" Needle valve & Bleed velve	2	bet		
	- 6" Fisher Type ED, Pressure: Control Valve with Pilot Box Complete set, ANSI 800#, RP, RTJ, WE ofw	1	set		
	Pressure Regulator with gasket, slud boits & nuts				
	10" - ANSI 6008 Trunnion mounted Inter Isolation BV, RF, WE with gasket, stud bolts 8 nuts	1	set		
	14" Oubel Header for Pressuni Reduction Skia		No		
201	Pressure Reduction Dutlet Lins c/w	1	100		
4.0	A second s				
	 Pressure Transmitter connected to Fisw Transmitter connected to Control room 		sei		
	- Temperature Probe, Thermowell & Temperature Transmitter connected to Control Room	1	Set		

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No	DESCRIPTION	QTTY	UNIT	UNIT PRICE US\$	COST USS
3	Metering Skid, Flow Capacity. 40 MMSCFD (2 = 100%)	2	Satemate		
	- 14" Inlet Header for Metering Skid	1	No		
	Each Metering Stream consists of the followings, but not limited				
	- 10" - ANSI 600#, Inlet Isolation BV, FE, RF, WE, with gasket, stud both & nuts	1	set		
	- 10° Noter Tube with straighter vanie	1	301		
	- 0- 1000 PBI Pressure gauge with 1/2" Noesic valve & Bleed valve	1	set		
	Pressure Transmitter connected to Flow Transmitter Control room	1	Sist		
_	Pressure Differential Transmitter connected to Flow Transmitter Control room	1	set		
	 10" - ANSI 600# Dual Chamber Senior Orifice Fitting, SCH 50, Both Flange End, RF or R13, c/w 13 Nos. assorted size SS Drifice plate. (4.00", 4.25", 4.50", 4.75", 5.00", 5.25", 5.50", 5.75", 6.00", 6.25", 6.50", 6.75", 7.00", 3.16:SS - Five Seta of Colfice Plate Setal "DS " Dual Setal Plate 	1	set		
-	- Temperature Transmitter, with Probe & Thermowell, Connect to Control room	1	set	())	
	- Femperatura Gauge, with Probe & Thermowell	1	set		
	- Gas Bleed off line with one 2" BV and 2" Globa Valve, 600#, RF, WE. To Common Vent Line	1	set		
	- 10" - ANSI 6008, Inter Isotation BV, FB, RF, WE, with gasket, stud bolts & nuts	1	set	400.000	400,0
	- 14" Cullet Header for Matering Sind	1	No	100,000	400,0
3.1	Flow measurement system c/w				
-	- Flow Computer		H 3		
	RTU. Houthy Report / Daily Report : Print Out				
- 1	- License Software & configuration				
	- Calibration tools / Equipments & Onsite Training	4	63		
	Cable Connection: Data Transfer from flow transmitter to Control Ream				
-	Deck Stop Computer, Display Face Plate and Printer with license software /IJ/PS_ett;	1		6	
	- Laptop Computer with hourse software				
3.2	Meter Outlet Line				
1	Full flow Safety Valve with upstream Isolation valve 6009 x 300% with gasket, stud bolts & nuts, Set Pressure 400 PSIG	1	sel		
-1	- 0-1000 PSI Pressure gauge with 1-2" Needla valve & Bleed valve	t	set		
	Pressure Transmitter connected to Flow Transmitter Control room	1	201		
	- Gas Bleed off line with 2" BV and 2" Globe Varve, 600#, RF, WE, To Common Vent Line	1	set		
	- 10" - ANSI 600#, Intel Isolation RV, FB, RF, WE with Stud Bohs & Nurs, with gasket	1	set		
-	Spares	1	Nolea		
	Accessories				
4.1	10" - ANSI 6004 BV, Trunnion mounted, FB, RF oliv moting flanges, gaskets, stud botte& nuts(for Filtration Skid)	1	set	13500	13500
	10 - ANSI 600# BV. Trunnion mounted, FB, RF ciw mating flanges, gaskets, stud bolts& ruls (for Prossure Skid)	1	set	13500	13500
	10" - ANSI 600# BV. Tronnice mounted, FB, RF c/w mating flanges, gaskets, stud bottes, nuts for Metering Skid)	i	581	13500	13500
4,4	2" x 6004 BV, RB, RF, WE c/w Gaskets, stud balts & Nuts	2	set	800	1600
4.5	2" x 600# GLV, RB, RF, WE drw Gaskets, stud botts & Nuts	2	set	900	1800
4.6	1" x 800# BV, RB, RF, WE dw Gaskets, stud bots & Nuts	2	895	450	900
4.7	1" x 800# GLV, RB, RF, WE orw Gaskets, stud bolts & Nuts	2	set	450	900
4.8	10° x 6° Concentric Reduce' Sch-80, Plain End, Steel- Butt Welding	2	Nos	120	240
4.9	10" x 4" Concentric Reducer Sch-80, Plain End, Steel- Butt Welding	2	Nos	100	200
.10	4" x 2" Concentric Reducer Sch-80, Plain End, Steel-Butt Welding	2	Nos	30	60
11	2" x 1" Concentro Reducer Sch-30, Plain End, Steel-Butt Welding	5	Nos	15	75
.12	10" 90 Deg Elbow, Sch- 60	5	Nos	200	1000
13	6" 90 Deg Elbow, Sch-80	2	Nos	50	100
14	4' 90 Deg Elbow Sch-80	2	Nas	40	80
15	2190 Deg Elbow Sch-80	3	Nos	25	75
15	6" x 4 Reducing Tex, Sch-80	3	Nos	100	300
17	2" Equal Tee Sch-80	5	Nos	50	250
(damagened	5" x 600# Companion Flanges, Stud Bolts & Nuts, Gaskels (2 Nos of Flanges)	1	set	350	350
_	4" x 600# Companion Flanges, Stud Bolts & Nuts, Gaskets(2 Nos of Flanges)	1	set	300	300
_	2" x 600# Companion Flanges, Stud Bolts & Nuts. Gaskets(2 Nos of Flanges.)	1	set	200	200
	3 Pena ITT Berton Chart Reporters & accessories with 2 Nos of Chart Drive, 50 Pkg of Chart & Spares	2	sets	10000	20000
	1/2" Instrument Double Block & Bleed	5	Set	400	2000
	0~1000 PSI Pressure Gauge	3	Set	125	375
_	M2" Needle Valve x 6000 PSI	3	Nos	80	270
	1/4 Needle Valve x 6000 PSI	3	Nos	75	225
	1/4" Type 1301 F Clinect Operated Pressure Reducing Fisher Regulation, Inlet Pr. 6000, Cutlet Fr. 10 - 225 PSIG, NPT		Mo	1000	1000
	1/2 Inch OD, Minimum 6000 PSI Rating SS Tube	60	meter	60	3000
	1/2" SS Compression Fittings, Elbow, Tee, Union & Coupling	5 Nos		60	1000
	SS Tube Binding Machine & Accessories, Ercoline Brand, MECI Bender ART 070 or Equivalent	1	967	1000	1000
	High Pressure Grease Gun with connections and accessories for varve greasing	- <u>-</u>	set	300	300
	Blow Out Line and Bleed Off Line System	cine			610.0000
_	6" Line Pice, ERW, Schl-80, API 51, Grzde 8 (PSL-2), Steel Line Pipe	500	8		25000
-	4" Line Pipe, ERW, Schl-80, API 5L Grade B (PSI, 2), Steel Line Pipe	400	2	50	20000
-	2" Lina Pipa, ERW, Schi-8C, API SL Grade B (PSL-2), Stool Lina Pipe	200	<u> </u>	50	10000
	a" ANSI 600#, BV, Trunion Mounted, RF, WE ziw Stud Bolts & Nuls	6	acta	3000	18000
-	4" ANSI 600#, BV, Trunion Mounted, RF, WE cive Stud Bolts & Nuts	3	Sals	2000	6000
	2" ANSI 600#, BV, RB, RF, WE dw Stud Bolts & Nuts	6	sala	450	2760
5.7	4° 600# Fisher ED Pressure Control Valve with Pilot Box Complete Set	1	set	20000	20000
۱.	000				1,429,80
11	610.9.8				1.92.0.0

APPROVED VENDOR LIST

Vendors at attached table have been approved by MOGE. The list is to be used as applicable by the CONTRACTORS/SUPPLIERS in accordance with the following criteria;

MOGE will take into consideration all Technical Queries, issued by CONTRACTOR, but MOGE reserves the right to reject, at its sole discretion such querles.

Discipline	Type of Equipment	Manufactures
Vessel	Filter Vessel	Peco Facet, PERRY, FLASH POINT, PEERLESS, OAKWELL, HYUNDAI, TOE
Cartridge	Gas Filter Cartridge	PEERLESS, PeCO , PALL, FRAM
Piping valves	Ball Valve, OPSO	KVC, Fiorentlni ,Cameron,Tyzo, Tormene,DEMCO,Fukuyama,FMC,Neway,KTM Bhoma,Cooper,Teer
Fiping Valves	Globe Valve	KVC, Fiorentini ,Cameron,Tyco, Tormene,DEMCO,Fukuyama,FMC,Neway,KTM, Bhoma,Cooper,Teer
Piping Valves	Pressure Safety Valve (PSV)	Sarāsin, Kunkle, Hydroseal, Faris,Leser
Piping Valves	Control Valve, Regulator, OPSO	Emerson-Fisher, RMG,CVS, Fiorentini Norriseal, Masopelian, Gascat
Instrument	Flow Measurement Orifice fittings and Plate	Emerson-Daniel, Canalta,TMCO,EMC Krohne, Elster, ABB
Instrument	3 Pen Chart Recorder	BARTON, Cameron
Instrument	Pressure Gauges	WIKA, Bourdon, Aschroft, ROTOTHERM, NUOVA FIMA
Instrument	1/4" and 1/2" Needle Valve	Parker, Kerotest/Marsh, Roforge, SACCAP, Oliver, Swagelok
Instrument	Transmitters/ Therma well	Emerson-Rosemount/Yokogawa/Foxboro/ ROTOTHERM, ABB, Krohne
Operation	Flow Computer	CMINI, FlowBoss, Yokogawa, Krohne, Siemen,ABB, Elster
Centrel	SCADA System	Emerson/Fisher Delta V Yokogawa,Siemen Krohne,Schneider

GAS COMPOSITION FOR DESIGN

COMPONENT

MOLE & (Normalized Value)

99.58822 0.09139 0.02234 0.00879 0.00211 0.00000 0.00335 0.17273 0.09805 0.01067 0.00234 0.00001 100.0000

METHANE
ETHANE
PROPANE
I-BUTANE
N-BUTANE
N-PENTANE
I-PENTANE
N2
CO2
C ₆ t
H ₂ O
H2S
TOTAL
DAV.
Dry.

Pol.

APPENDIX

FUNDAMENTAL SPECIFICATIONS

BALL VALVE

- (i) Valves shall be ball type and the valve body shall comply with the requirements for isolation valves and be of the same ANSI class of the line in which the valve is installed.
- (ii) Ball valves shall be manufactured and tested in accordance with the requirements of API 6 D for 2 inch and above and BS 5351 for sizes below 2 inch. Globe valve shall be manufactured and tested in accordance with BS 1873.
- (iii) Valve body design with threaded joints will not be acceptable.
- (iv) Valves shall have double block and bleed feature to facilitate complete flushing, draining and venting of the valve body cavity with valve in fully open or fully closed condition.
- (y) Locking devices shall be provided to accept padlocks, wherever applicable.
- (vi) Ball shall be made by forging or casting. Steam shall be fabricated from forging only. Carbon steel/ Low alloy steel ball and stem shall have 0.003 lnch electro less nickel plating with a minimum hardness of Rockwell - C65.Chromium plating on ball and stem is not permitted.
- (vii)Carbon steel / low alloy steel seat rings shall have 0.003 inch electro less nickel plating with a minimum hardness of Bockwell - C50.
- (viii)Valves having body, bonnet, cover and / or end flanges made of cast iron or ductile iron are not acceptable.
- (ix) For values of ANSI 600 all elastomeric seal materials used shall be resistant to explosive decompression.
- (x) Minimum Hydrotest duration for shell test shall be 15 minutes for sizes up to and including DN 250.
- (xi) Seat test duration shall be 5 minutes for all sizes.

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BALL VALVE DATA (Not Limited to)

BODY CONSTRUCTI OPERATING TEMP	ZE 2" ~ 12" ON 3 Pleces Side Entry Design 60 ~ 120 Deg F -29 to 100 Deg C Gear Operated > 6 Inch BV
	API 6D.ASME B 16-34 Trunnion Mounted 2 Zinch Floating Ball < 2 Inch Fire Safe Design Antistatic feature
	RB for all pipe line valves, FB only for Meter Tube Isolation valves
	API 65,ASME B16.10 RTJ/RF ,FLANGE ;ASME B16.5 ("SMOOTH FINISH" FACING)
SERVICE CLASS	E MATERIALS OF PARTS
BALL STEM SEAT SEAT/STEM O -RING(SEAT SPRING	A105 / A216 WCB,ASTM A 350 LF2 / LF6 A105 / A216 WCB A105ENP(+)0.003" ENP,A350 LF2 /AISI 4140+0.003"ENP A 162,AIS! 316, A 350 LF2 / AISI 4140 + 0.003 ENP A105+ENP,A162 (F316) ,Spring Energized, Nylon, PEEK SEAL) HNBR /VITON(FKM) AED ,Elast-O-Lion 965 Inconel X 750 A 193 B7/A 194 2H/A 320 Gr L7M Zinc Plated Bichromated A276-304 304 +PTFE A105 Spiral wound, graphite filler,

GLOBE VALVE , REDUCED BORE

BODY	A105 / A218 WCB,
BONNET	ASTM A216 Gr.WCB
STEM	ASTM A 276 Gr 410
SEAT RING	BS 970 070M20 OR ASTM A 106B + 13% chrome steel
DISC	BS 970 070M20 + 13) chroma steel faced
DISC NUT	ASTM A276 Gr.410
GLAND PACKING	Flexible Graphite rings intermediate with Non- Asbestos braided filament ring
BOLTINGS	A 193 B7/A 194 2H/A 320 Gr L7M Zinc Plated Bichromated
VALVE DESIGN	Long Pattern, Outside screw, and yoke (OS & Y), rising
1	stem, swivel plug disc, removable seat, BB

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< 2 Inch (800#,1500#)

BGDY	SW,A 182 , SW , A 105,
STEM	F316 L, Stellite coated, OS & Y,BB
WEDGE/DISC& SEAT (SWIVEL PLUG DISC)	HARD FACED OVEFLAYED WITH STELLITE COATED
REMAIN PARTS	SEE IM BALL VALVE (ABOVE)

PILOT OPERATED REGULATOR

- (i) Regulator shall be designed as per DIN 3380.
- (II) All Regulators shall comply with EN 334 (Type Test Certificates are required).
- (iii) Regulator shall be pilot operated self actuated through line gas.
- (iv) Pressure regulators shall preferably be axial type.
- (v) End connections shall be FF flanged.
- (vi) Limit switches shall be provided to indicate open and close positions.
- (vii) The value shall be designed to control the outlet pressure.
- (viii)Regulator shall be sized to deliver the maximum flow at minimum pressure condition and the minimum flow at the maximum pressure condition. Noise calculations shall be furnished accordingly by Vendor. Pressure drop across the regulator for purpose of sizing etc. Shall be taken as per the conditions specified in the relevant datasheets.
- (ix) The maximum increase of the downstream pressure or "closing overpressure" shall not exceed 5% of the set pressure.
- (x) It shall be possible to modify the nominal flow by changing easily the internal restriction pieces of the valves.
- (xi) Set points shall be adjustable .Vendor shall furnish the adjustable range of the pilots.
- (xii) Control range shall be sufficient to cover the required set pressure limits.
- (xiii)The accuracy of the regulated outlet pressure shall be +/2.5% of the set pressure for a flow varying from 10% to 100 %

(x iv) The seat leakage classification shall be Class IV according

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to ANSI B 16.104.

- DIN 3381 Safety devices for gas supply installations. operating at working pressures up to 100 bar ; pressure relief governors and safety shut-off devices
- EN 12188 Gas supply systems Gas Pressure Regulating stations for transmission and distribution - Functional requirements
- EN 14382 Safety devices for gas pressure regulating stations. and installations
- EN 334 Gas pressure regulation inlet pressure up to 100 bar
- ISO 2186 Fluid Flow in Closed Conduits Connections for Pressure Signal Transmissions between Primary and Secondary Elements
- IS 800;1984 & IS2062;1999 Skid Fabrication and Construction.

REGULATOR DATA

REGULATOR TYPE BODY STYLE BODY MATERIAL CAGE SFRING BACKUP RINGS BONNET END CONNECTION

DIAPHRAGM MATERIAL MAIN VALVE, MAIN SPRING CAPACITY TRAVEL INDICATOR INLET STRAINER INLET-BODY TAP PRE-PIPE INLET

EZE OR EQUIVALENT GLOBE A 216 WCR/WCC STEEL STAINLESS STEEL STAINLESS STEEL TEFLON / PIFE ASTM A 350 gr LF 2 CLASS 300, RF FLANGE WITH COMPANION FLANGE GASKETS , STUD BOLTS & NUTS 17 E 97 NITRIL(NBR) (0-150) deg F, BLACK < 500 PSIG OR EQUIVALENT 100 % YES YES S 31600 STAINLESS STEEL No YES

PILOT FOR WORKING AND MONITORING REGULATOR

PILOT TYPE PILOT BODY /SPRING CASE PILOT SPRING RANGE DIAPHRAGM O-RING RESTRICTOR

161 EB/PRX Series OR EQUIVALENT CF 8 M/SST Ad per Tender Requirement NITRILE (NBR) NITRILE (NBR) TYPE 112 SST

PRESSURE CONTROL VALVE

(i) The Control valve shall preferably be of globe type considering throttling service at high velocity gas flow

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- ii) Actuator shall be pneumatic (gas /air operated)and of "FAIL OPEN or FAIL-CLOSE" type as per tender requirement.
- iii) Control valve shall be sized to deliver the maximum flow at minimum pressure condition and the minimum flow at the maximum pressure condition. Noise calculations shall be furnished accordingly by Vendor. Pressure drop across the valve for purpose of sizing etc. shall be taken as per the conditions specified in the relevant datasheets.
- iv) Limit switches shall be provided to indicate open and close positions.
- v) The maximal increase of the downstream pressure or "closing overpressure" shall not exceed 5% of the set pressure.
- vi) It shall be possible to modify the nominal flow by changing easily the internal restriction pieces of the valves.
- vii) The accuracy of the regulated outlet pressure shall be +/- 25% of the set pressure for a flow varying from 3% to 100%
- viii)The seat leakage classification shall be Class IV according to ANSI B 16.104.
- ix) Control range shall be between 10 % and 90% of values travel range.
- x) DRY gas is expected, which will be used for value actuation. However vendor shall incorporate gas filtration arrangement before supplying to the actuator, for better reliability.
- x:) Vendor need to calculate the controller downstream temperature and support to MOGE for downstream piping material selection.
 - ANSI B 16.104 & TCI 70-2 Control Valve Seat Leakage
 - ASME B 16.5 Steel Pipe Flanges and Flanged Fittings
 - ANSI B 16,36 Steel Orifice Flanges

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- · ANSI B 16.37, API 598 Hydrostatic Testing of Control Valves
- ISA S 75.1 Flow Equations for Sizing Control Valves
- ANSI/ISA S75.06 Control Valve Manifolds
- · API 6D Pipeline Valves, End Closures, Connectors and Swivels
- API 6FA Specification for Fire Test of Valves
- API 598 Valve Inspection and Testing
- BS 5155 Butterfly Valves
- BS 5351 Steel Ball Valves
- BS 6364 Valves for Cryogenic Service
- BS 6755 Pt 1&2 Testing of Valves
- ISA \$75.01 Flow Equations for Sizing Control Valves
- ISA \$75.03 Face-To-Face Dimensions for Flanged Globs Style Control Valves

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PRESSURE CONTROL VALVE DATA

9004,5004,3004 PRESSURE RATING BODY TYPE GLOBE, BODY MATERIAL ASTM A 216 WCE/WCC STEEL , CF 8 M CAGE(TRIN YMATCHIAL S 174000(17-4PH SST) H-900, Whisper Trim VALVE PLUG MATERIAL S416060 (HAEDENED 416EST) S 316000(316 SS)with Coor-A hard facing on Seat & Guide SEAT RING S 41600/S31600 with CoCr-A on seat FORT STZE An Per Vendor Design SHUT OFF CLASS iv For 900#, III For 600# & II For 300# PACKING PTFE ACTUATOR SPRING & DIAPHRAON TYPE 657,667 Series DIAPERAGM NITRIL/SILICONE ELASTOMER ACTION As per Tender END RE/RTJ WITH MATING FLANGES, GASKETS, STUD BOLTS & NUTS FOR BOTH ENDS TO BE CUI BEVELLED FOR BUTT WELDG ENDS FLANGES CL OR 4150K/4160K Series Wizard II POSITIONER PNEUMATIC PRESSURE CONTROLLER (Gauge Pressure), PNEUMATIC SIGNAL (3-15PSIG), SST BOURDON TUBE AND 67 AFR REGULATOR, YOKE MOUNTED ON SONTROL VALVE ACTUATOR.

> BOURDON TUBEPRESSURE RATING TO BE SELECTED AFTER LIAISE WITH PURCHASER

FISHER TYPE 1301F SERIES PRESSURE REDUCING REGULATOR

MAXIMUM INLET PRESSURE	6000 PSIG
OUTLET PRESSURE RANGE	100-225 ESIG
CONNECTION	1/4" NPT FEMALE
NORMAL OPERATING TEMPERATURE	20 TO 150 DEG F
VALVE DISK	PTFE
GASKET	EPDM
BODY/ORIFICE	316,85
NACE	YES

ORIFICE METER RUN

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The Complete Orifice Meter Run consists of the meter tube, senior orifice Fitting and the necessary straight run piping. The meter run will be installed outdoors.

Design Data; The orifice meter shall be designed in accordance with AGA-3 latest version. Strength Calculation shall be in accordance with the requirements of the ASME B 31.8 Guide for Gas Transmission & Distribution Piping Systems.

Meter Tube; Meter tube Inside Diameter, tolerances and roughness shall be determined and recorded. Values shall be within limits of AGA-3. Piping

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upstream & Downstream orifice Runs shall be in accordance with AGA-3 for d/D (Beta) ratio of 0.7.

Senior Orifice Fitting: The orifice fitting shall allow for exchange of the orlfice without interrupting the flow through one meter run (Drifice meter to be provided with place carrier to protect orlfice plate). The fitting shall be furnished with welding neck RF Companion flanges, RF gaskets, Stud Bolts & Nuts for both ends.

Orifice Plates; The Orifice shall be made of stainless steel ANSI 316 Orifice dimensions D and d as per AGA-3 shall be permanently marked at the circumference of the orifice.

SENIOR ORIFICE FITTINGS

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-DANIEL CAT 103 ' DS ' SENIOR ORIFICE FITTINGS, OF EQUIVALENT -CARBON STEEL BODY -STANDARD STAINLESS STEEL TRIM, -ONE PCE " DS " (DUAL SEAL) FOR ORIFICE PLATE SEALING. -TO SUPPLY WITH WELDING NECK RF COMPANION FLANGES, RF GASKETS, STUD BOLTS AND NUTS FOR BOTH ENDS -DANIEL GAT , 500 UNIVERSAL SPARE ORIFICE FLATES 316 SS , 1/3" Thickness

THREE PEN BARTON CHART RECORDER (GAS FLOW METER) Complet with instrument inlet, outlet piping / valves / vent

HOUSING MATERIAL	CARBON STEEL (OR) FORGED STEEL 199 DPU,2500 PSI
BELLOW	316 55
SPRINĞ	INCONEL/SS
CHART DRIVE	24 HRS / 7 DAYS , DUAL MECH
STATIC PRESSURE	0-1000 PSI
DIFFERENTIAL PRESSURE	0 - 200 " WOG
TEMPERATURE	0 - 150 (DEGREE - F)
CONNECTION	1/2" NPT TOP X 1/4" NPT BOTTOM WITH
	THREE VALVES MANIFOLD.
	IC FT OF SS ARMOURED CAPILLARY AND
	4" SS THERMOWELL
MOUNTING	2" PIPE SLIP ON MOUNTING
WINDOW	GLASS
PRESSURE SAFETY RELIEF VALVE	/ RELIEF VALVE

- PSV shall be soft seated, preferably conventional type. In case service conditions require plict operated valves then pilot shall be non-flowing type and shall be designed failsafe.
- (ii) Relief values shall be carbon steel with stainless steel trim as minimum and aluminized carbon steel (suitable for the fluid) springs shall be used.

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(iii)Safety valves sizing and selection shall be in accordance

with API RP 520 , API RP 521 , API RP 526 and Section I and VII of the ASME boiler and Pressure Vessel Code.

- (iv) PSV to be sized for "blocked discharge" condition.
- (v) Vendor to provide maximum allowable back pressure with restricting capacity. To install RO by the design requirement.
- (vi) A connection for field test shall be provided.

(vii)Seat tightness shall meet the requirement specified in API 527.

Creep Relief Valves (CRV)

- (i) CRV shall be soft seated and of conventional type.
- (ii) Relief valves shall be carbon steel with stainless steel trim as minimum and aluminized carbon steel (suitable for the fluid) springs shall be used.
- (ili)Sizing and selection shall be in accordance with API RP 520, API RP 521, API RP 526 and Section I and VII of the ASME boiler and Pressure Vessel Code.
- (iv) CRV to be sized for :Creep relief" condition when the valve passed under closed conditions.
- (v) Vendor to provide maximum allowable back pressure with restricting capacity ,
- (vi) A connection for field test shall be provided.
- (vii)Seat tightness shall meet the requirement specified in API 527.
 - API RP 520 Pt 162 Sizing, Selection and Installation of Pressure Relieving Systems in Refineries
 - API RF 521 Guide for Pressure Relieving and Depressurizing Systems
 - API 526 Flanged Steel Safety Relief Valves
 - API 527 Commercial Seat Tightness of Safety Belief Valves with Metal- To-Metal Seat
 - · API 2000 Venting Atmospheric and Low-Pressure Storage Tanks
 - ANSI/ISA S 75.06 Control Valve Manifolds
 - ISO 6718 Bursting Discs and Bursting Discs Devices

SAFETY VALVE DATA

BODY	A216 WCB, CF 8M
HALI.	STELLITE
SEAT	316 35
BODY SEAT/CAP SEAL	HNER/VITON(FKM)
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O-RING HNDR/VITON(FKM) SPRING 316 SS/INCONEL TYPE CONVENTIONAL SPRING LOADED TYPE FOR FAST OPENING USAG NATURAL GAS FLOW LINES AND OTL & GAS SEPARATOR, NOTE ORIFICE SIZE SHOULD BE ALLOWABLE MAXIMUM STZE (.) PRESSURE SETTING MUST BE FIELD ADJUSTABLE (.)

NEEDLE VALVES

PRESSURE RATING	WP As Per Tender,		
BODY	A 105 /A 479 55 316 ,		
BORE	REDUCED BORE/STRAIGHT TYPE		
SEAT	METAL TO METAL		
STEM	SS 316/		
GLAND PACKING	PTFE / VITON / GRAPHOIL		
END CONNECTION	1/2" NPT FEMALE X FEMALE ENDS		
	1/4" NPT FEMALE X FEMALE ENDS		
	ZERO LEAKAGE		
FINISH	CS ZINC FLATED & DICHROMATED.		

Field Instruments

- i) The field instrument comprising gauges, transmitters, RTD etc. shall be selected in accordance with the specified process and project requirements. The instruments shall only be procured from the vendors approved by the purchaser.
- ii) The pressure instruments shall be provided with individual process isolation valves and block and blocd manifolds.
- iii) The pressure transmitters shall be SMART type with 4-20 mA DC two wire outputs, 24 VDC loop powered , and 316 SS construction complete with local output meter (LCD type).
- 1.1 The temperature transmitters shall be Pt 100 RTB sensor type with integral head mounted SMART transmitter with two wire 4-20 mA DC output ,24 VDC loop powered complete with local output meter (LDC type). The temperature transmitter shall be provided with flanged thermo well of 31655 material fabricated from drilled bar stock.
- v) Pressure gauges shall be of 150 mm dial safety pattern type with blow out back. Material of construction shall be 316 SS for both internal and casing.
- V. Temperature gauges shall be of himetallic type rotatable at all angles. Dial size shall be 125 mm. The temperature gauges shall be provided with thermo well of 31688 construction with flanged connection and fabricated from drilled bar stock.

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vii) All field instruments shall be weatherproof to TP 65 as a minimum.

viii) The electronic transmitters shall be certified flame proof

- · (EE xis/ib ISA 7.3 Quality Standard for Instrument Air
- ISA S 7.4 Air Pressure for Encumatic Controllers, Transmitters and Pneumatic Systems
- ISA RP7.7 Recommended Practice for Producing Quality Instrument Air
- ISA RP 7.1 Pneumatic Control Circuit Pressure Test

PRESSURE GAUGE (PSI)

CASE	STAINLESS STEEL /ALUMINIUM
DIAL SIZE	6"
TUBE	STEEL
CONNECTION	SS, 1/2" NPT MALE # BOTTOM
BLOW OUT DISC	ELASTOMER
SENSING ELEMENT	SS 1.4571 OR 1.4404 /SS 316-BOURDON TUBE
POINTER	ALUMINTUM, MICROMETER
ACCURACY	CLASS 1.6 , +/~ 2 %
DIAL	ALUMINIUM ALLOY, RUBBER ZERO STOP
LIQUID FILLING	OIL FILLED WEATHER PROFF, GLYCERINE

TEMPERATURE GAUGE

- ANSI MC 96.1 Temperature Measurements Chermocouples
- ASME PTC 19.3 Thermo well Design
- · ES 1041 Code for Temperature Measurement
- BS 2765 Dimensions of Temperature Detecting Elements and Corresponding Pockets
- BS 4937 Thermocouple Reference Tables
- BS 5235 Dial Type Expansion Thermometers
- · EN 60751 Industrial Platinum Resistance Thermometer Sensors
- IEC 60751 Industrial Platinum Resistance Phermometer Elements
- ICE 60584-1, BS 493/ International Thermocouple Reference Tables
- ICE 60584-2 , Thermocouple -Tolerances
- ICE 60584-3 , Thermocouple -Extension and Compensating Cables
- ISC 8310 Temperature Measurement Systems

Bimetallic Type and be of "any angle" type with a view to rotate the gauge to facilitate viewing the desired angle. Weather Proof.6" Dial Size, shall be constructed SS 316

BUTTWELDED NECK FLANGE, ANSI 300#, 150# With Gaskets , Stud Bolts & Nuts , (2PCS PER SET)



MATERIAL: BONNET STUD ASTM A 105/A350 LF 1 A193-87



BOWNET STUD NUT A194-2H

FORGED STEEL FITTINGS (Tee, Elbow, ...), 2 Inch And Greater

MATERIAL: PRESSURE RATE. MANUFACTURING STANDARD THREAD WELDED END

A 1057A 350 LF2 OR ASTM A 182 F 3161 Is Par Tender ASME B16.11, ANSI B 16.9 NPT STEEL BUTT WELLING

FORGED STEEL FITTINGS (Tee, Elbow, .), < 2 Inch

MATERIAL; PRESSURE RATE. MANUFACTURING STANDARD CHREAD WELDED END

A 105/A 350 LEC OR ASTM A 182 F 316L As Per Tender ASME B15.11, ANSI B 16.9 MET STEEL BUTT WELDING

LINE PIPES

ELECTRIC RESISTANT WELDING (ERW) STEEL LINE PIPES CONFORMING TO FOLLOWING API GRADES FOR GAS TRANSMISSION. PIPES SHALL BE FURNISHED WITH PLAIN ENDS BEVELLED TO AN ANGLE OF 30', + 5', -0' WITH A ROOT FACE OF 1/16"+ 1/32" AND SHALL BE SUPPLIED WITH BEVEL PROTECTORS. THE PIPE SHALL BE GIVEN INTERNAL AND EXTERNAL STANDARD MILLS COATING APPLIED TO THE FULL LENGTH TO PREVENT AGAINST RUSTING WHELE IN TRANSIT, TRACEABILITY REPORT FOR MECHANICAL , CHEMICAL, PROPERTIES AND NDT RESULTS SHALL BE ESTABILISHED AND SENT ALONG WITH MANUFACTURED PIPES. THE SPECIFICATIONS, SIZE AND QUANTITY OF PIPES TO BE SUPPLIED ARE AS FOLLOWS :-

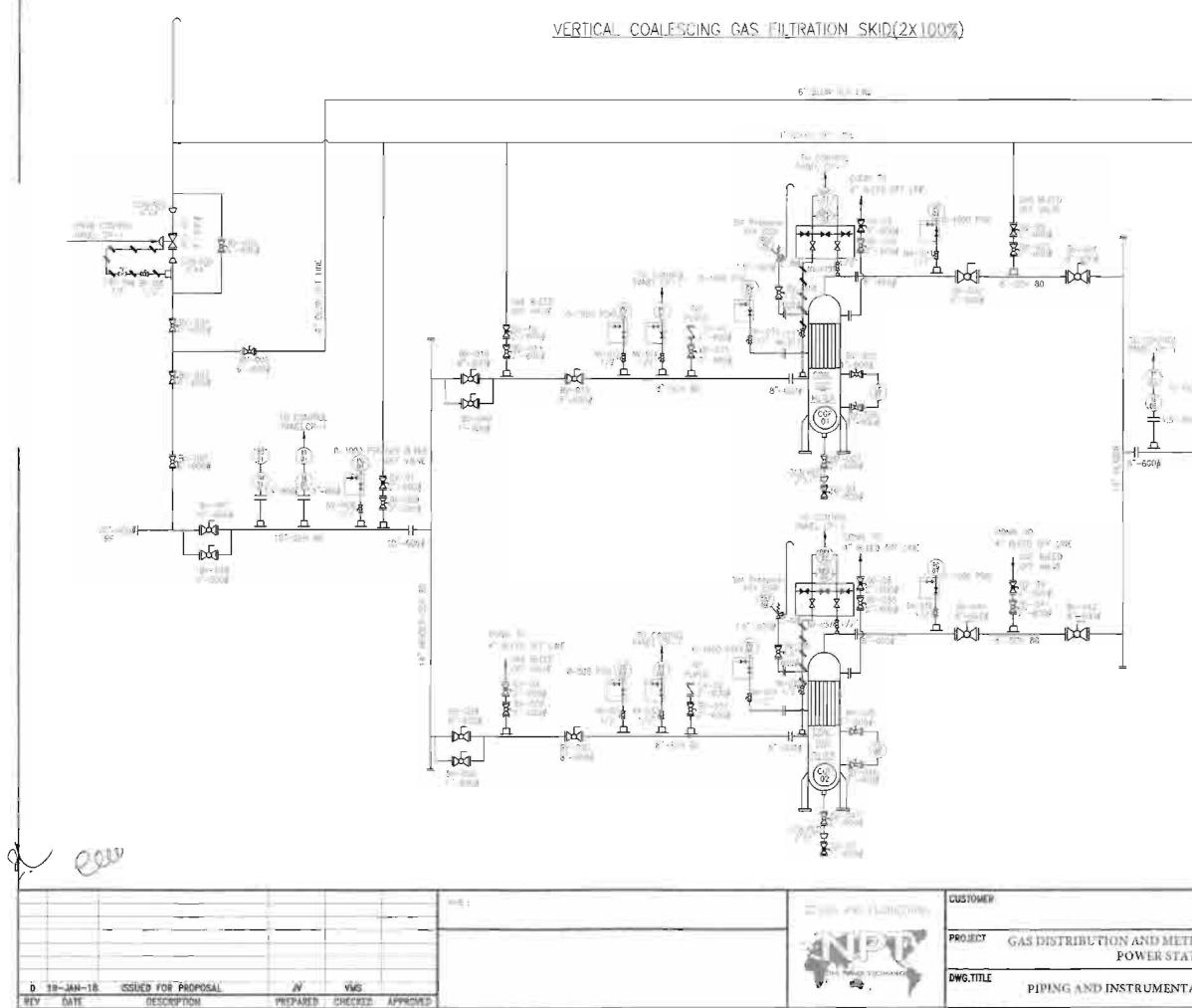
MATERIAL

CARBON STEEL

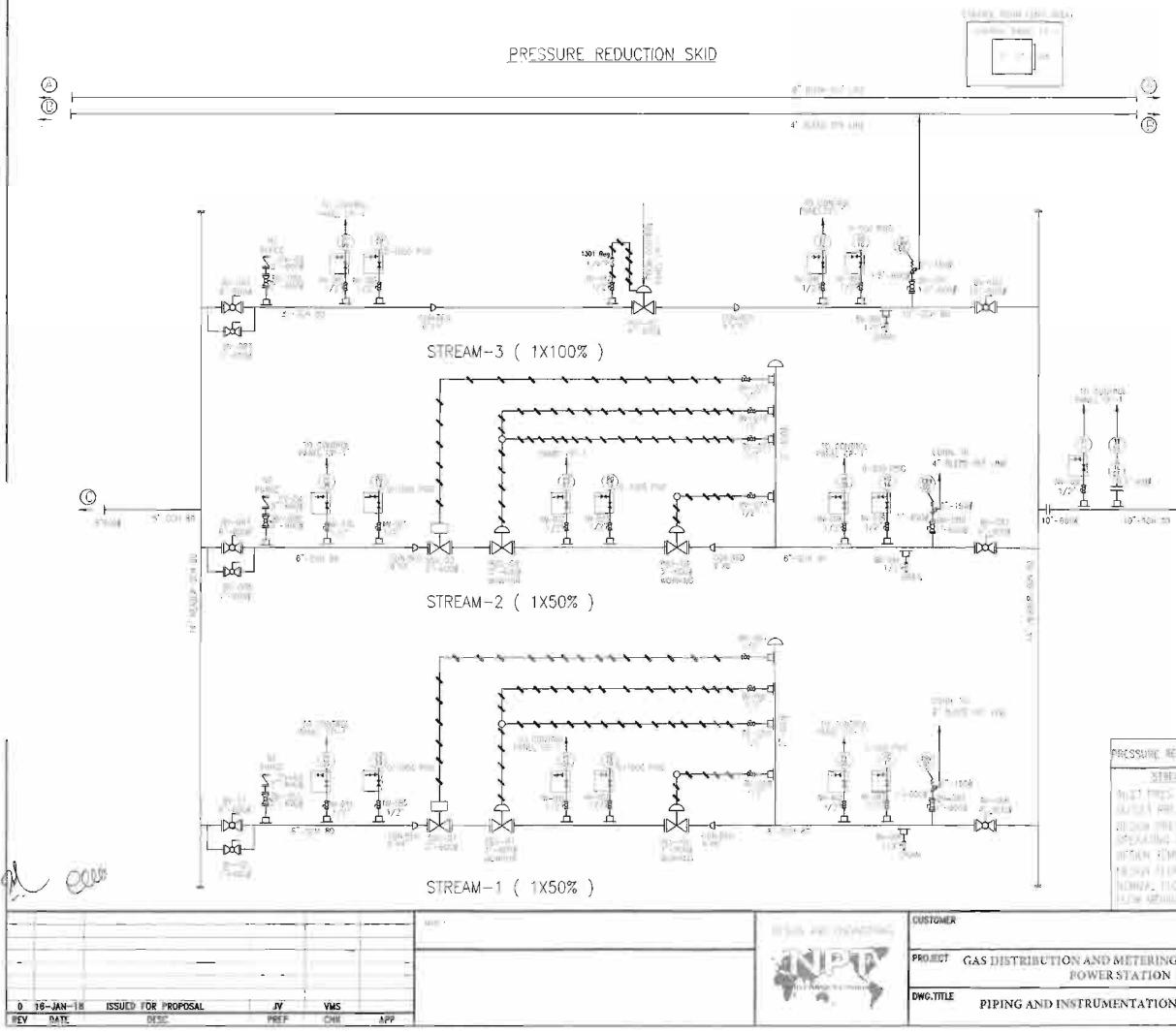
RANDOM LENGTH 25 FT TO 40 FT

CHEMICAL REQUIREMENTS, PERCENTAGE OF WEIGHT

Carbon	Manganese	Phosphorus	Sulphur
(max)	(max)	(max)	(max)
0.28	1.20	0.030	0.030



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	SCALE	NTS	REV
ATION DIAGRAM	PAGENO	1 3	



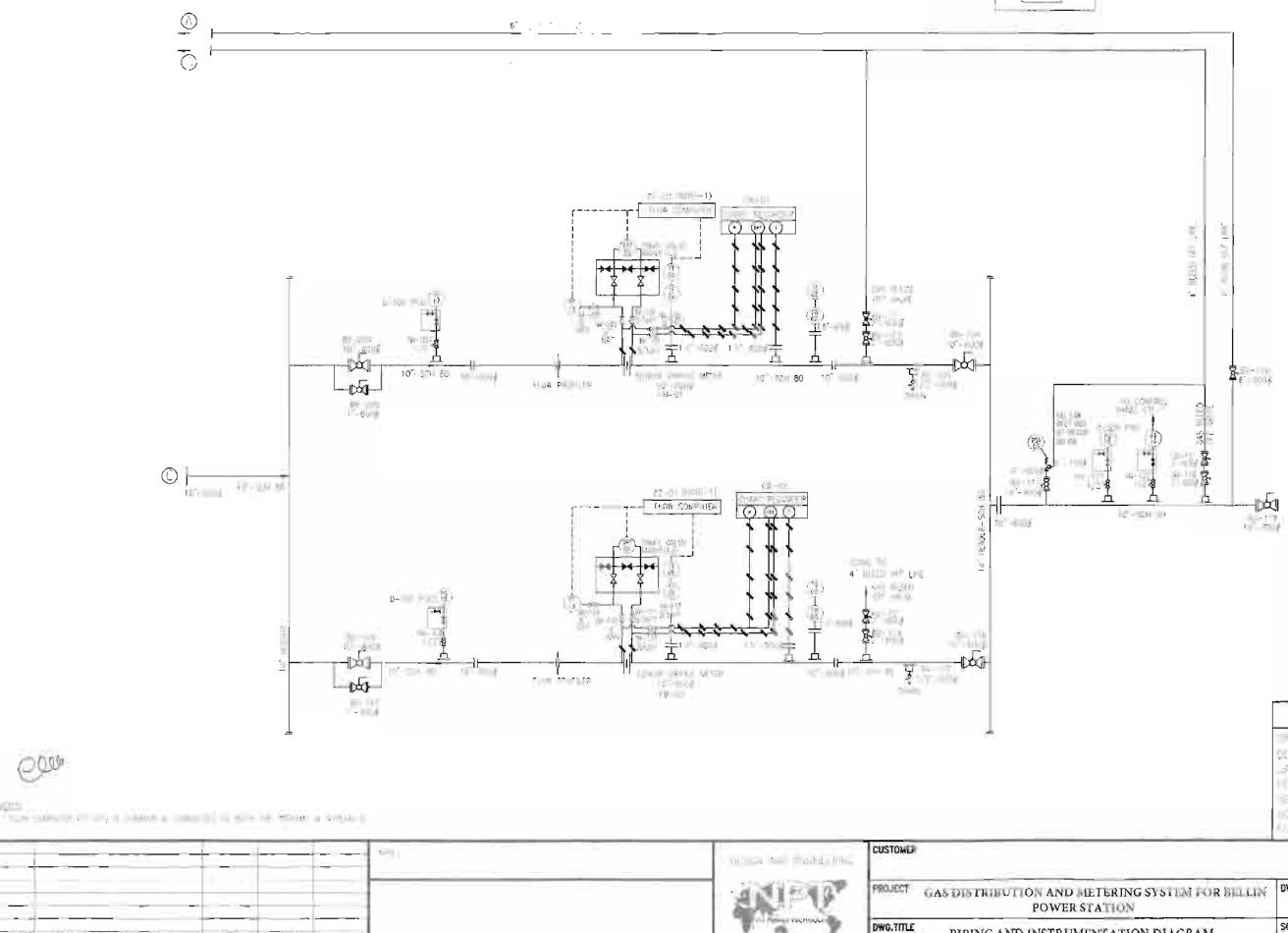
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METERING SKID - (2 X 100%)





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S DISTRIBUTION AND METERING SYSTEM FOR BELLIN POWER STATION	DWG-001		<i>u</i>
PIPING AND INSTRUMENTATION DIAGRAM	SCALE	NTS	REV
	PAGE.NO	3 3	0

Annex 5 Payments and Tariffs

5.1 Electric energy production

From the Commercial Operation Date to the expiration or termination of the term of this Agreement, the guaranteed electric energy delivered to EPGE System and "take or pay // shall be apply the Figure as mentioned below

Year	Net Guarantee Output	Available Hour	Delivered to Grid (MWh)	Guaranteed amount for February to June (MWh)	Guaranteed amount for July to January (MWh)
1	145.49	7,008	1,019,594	497,576	522,018
2	145.49	7,008	1,019,594	497,576	522,018
3	145.49	7,008	1,019,594	497,576	522,018
4	145.49	7,008	1,019,594	497,576	522,018
5	145.49	7,008	1,019,594	497,576	522,018

Table 5.1 Guaranteed Electrical Energy for project Term

Dry season means, for any given calendar year, a period of up to five (5) consecutive months, determined by EPGE and notified the Company in writing by no later than 15 January of each calendar year as being "dry season" for that calendar year for the purpose of this agreement, provided that no such notice is given in any calendar year, the "dry season" for that calendar year will be the period from 1st February to 30th June (both date inclusive) in that calendar year.

Wet season means all times during any calendar year other than dry season.

The Guarantee amount for dry season and wet season shall be considered on pro-rata basis for partial months and days in a year, based on the number of operational days of each year over the total number of days in the relevant season.

5.2 Guaranteed Electric Energy Production for Dry and Wet Season

EPGE divided the year as dry season and wet season, and the Company shall produce, on behalf of EPGE, the energy guarantee amount described in Table 5.1. The Guaranteed Electric Energy shall be specified as "Guaranteed Electrical Energy for Project Term" for each period. Take or pay amount shall be considered for dry season and wet season separately.

5.3 Energy Settlement and Guaranteed Off-Take Energy Settlement

From the Commercial Operation Date to the expiration or termination of the term of this Agreement, the Company shall charge EPGE and EPGE shall pay the Company energy rental payments as follows:

Monthly Payment:

Energy Settlement = A * T

- A = Actual Delivery Electrical Energy to EPGE System (MWh)
- T = Tariff (Energy payment) shall be 33.4274 (USD per MWh)

The above tariff is inclusive of 2.5% withholding tax and 5% commercial tax. In the event that withholding tax or commercial tax on energy payment is exempted or changed, tariff shall be adjusted accordingly. If withholding tax is applicable, EPGE shall deduct withholding tax and make payment to the tax authority on behalf of the Company. EPGE shall provide the copy of documentation evidencing that the payment of withholding tax in relation to each energy payment invoice has been made to the tax authority to the Company as soon as practicable. If commercial tax is applicable, the Company shall make payment to

the tax authority and provide the copy of documentation evidencing that the payment of commercial tax in relation to each energy payment invoice has been made to the tax authority to EPGE as soon as practicable.

"take or pay" Settlement:

Provided the Monthly Payment had been fulfilled, at the end of dry season and wet season within 14 days, the Company and EPGE shall hold a meeting to settle the generation and payment in the following methods.

If $A \ge G$, EPGE takes and the Company dispatch electrical energy actually delivery to the system is more than the guaranteed electrical energy amount, there has not any shortfall for both Parties and any other take or pay is not occurred.

If G-A > 0, EPGE take and the Company dispatch electrical energy actually delivery to the system is less than guaranteed electrical energy volume, and the payment shall be calculated and paid as follows:

● (G - A- D_{Company}) * T

G = guaranteed electrical energy volume (kWh)

 $D_{Company}$ = the Company fails to delivery such electrical energy generation to EPGE due to the forced outage of generation equipment that is solely attributable to the Company's default (kWh), which is calculated as: default hours * (Guaranteed Amount for dry or wet season / dry or wet season calendar hour)

A = Actual Delivery Electrical Energy to the System (kWh)

If result of above equation is positive, EPGE shall pay above amount to the Company for the force outage of the Company that is solely attributable to the Company's default (D_{Company}), the Company shall pay the liquidated damages to EPGE as follows:

In dry seasons, the liquidated damages shall be one hundred percent (100%) of the shortfall amount of the energy generation (100% x D_{Company} x Tariff).

In wet seasons, the liquidated damages shall be Ten percent (10%) of the shortfall amount of the energy generation (10% x $D_{Company}$ x Tariff).

Annually settlement:

If the Actual Delivery Electrical Energy to EPGE System (MWh) exceeds the Guaranteed Amount for each season specified in table 5.1 above, EPGE shall purchase such exceeding generation unit and the tariff for such excess of Guaranteed Amount with 2.5% withholding tax and 5% commercial tax is 32.4354 (USD per MWh)

Annex 6 Scope of Services

The Company shall, by itself and/or through a qualified contractor, provide the following services (collectively, the "Scope of Services"):

- (a) construction, installation, commissioning of the Gas Engines;
- (b) operation and maintenance of the Gas Engines;
- (c) construction, installation, commissioning of the required gas supply infrastructure for the Gas Engines;
- (d) carry out the civil engineering works, and to design and construct the foundation and Control Room to install and run the Gas Engines;
- (e) carrying out all the matters relating to acquisition of lubricant/battery/ water supply for cooling system/minor repairs/major repairs, maintenance and cleaning with effect from the Commercial Operation Date;
- (f) administration of the Company Personnel according to applicable labour laws;
- (g) subject to Annex 2 and Annex 4, the Company Personnel under the control of the Company shall, run the Gas Engines and generate the guaranteed electric power supply twenty-four (24) hours continuously in accordance with the Dispatch Procedures in Annex 3; and
- (h) synchronizing the Gas Engines to provide for Parallel Base load Operation simultaneously to generate power through the Company Personnel.

Annex 7 Company's Designated Bank Account

	Bank Name Bank address	: AYA Bank , Yangon (26) (Ayeyarwady Bank Limited) : No.416, Maha Bandola Garden St., Middle Block, Kyauktada Township, Yangon Region, Myanmar
	Account Name	: POWERGEN KYAUKSE COMPANY LIMITED (FCA)
	Account Number	: 008-010-303-0025363
	Swift Code	: AYABMMMYXXX
	Account Name	: POWERGEN KYAUKSE COMPANY LIMITED (MMK)
\bigcirc		: 008-011-301-0036139

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Annex 8 Guaranteed Technical Parameters for Power Plant

S.No.	Description		Bidder's Scope
1	Installed Capacity MW - (No. of Unit x MW/ Unit)		147.768 MW (8 units x 18.471 MW/Unit)
2	Guarantee Generating Output MW - (No. of Unit x		145.490 MW
	MW/ Unit) at site Condition		(8 Units x 18.18625 MW/Unit)
3	Generator Output Voltage (V)		11 kV
	Net Efficiency (%) (Plant overall)	50% Load	41.34% based on HHV
		100%Load	41.34% based on HHV
	Net Guarantee Heat Rate (Btu/kWh)	50% Load	8,253.80 Btu/kWh
	(Plant overall) (at any site condition based on Higher Heating value)	100% Load	8,253.80 Btu/kWh
4	Fuel cost (US cents/kWh) = Net Guarantee Heat Rate (Btu/kWh) * gas price (USD/MMBtu) /10,000	50% Load	8.03 US cents/kWh
	Fuel cost (US cents/kWh) = Net Guarantee Heat Rate (Btu/kWh) * gas price (USD/MMBtu) /10,000	100% Load	8.03 US cents/kWh
	Fuel Consumption based on High	50% Load	14.3 MMCFD
	Heating Value	100% Load	28.5 MMCFD
	kWh/mmBtu @ High Heating Value	50% Load	121.2 kWh/mmBtu
	(Plant overall) at any site condition 100% Load		121.2 kWh/mmBtu
5	Number of Total Running Unit		8
6	Number of Reserved Unit/Machine Model		0
7	Maker & Country of origin		W18V50SG engines manufactured by Wärtsilä Finland Oy in factory located ir Tríeste, Italy, European Union
8	Land requirement for power plant and new switchbay		24,000 m ²
9	Site Layout Plan		Please refer the attached General Layout F0419T-2-01
10	Construction Period (After issuing the Letter of Acceptance)		286 days after LOA
11	COD (After issuing the Letter of Accept	ance)	286 days after LOA
12	Proposal for required new switchbay an line facility	nd transmission	Please refer the attached Singl Líne Diagram F0419T-D01-01
13	Proposal for required new gas supply infrastructure		Please refer the attached Gas Supply Infrastructure Drawings and Map
14	Required gas pressure of power plant		Minimum 12.5 bar gas regulating unit inlet
é.	0000		

S.No.	Description	Bidder's Scope
15	Transformer Voltage ratio, Capacity, Vector group, Maker and country of origin (for low voltage side)	2 × [70MVA, 145±2X2.5%/11Kv,Ynd11] 1 × [50MVA, 45±2X2.5%/11kV Ynd11] Please see attached information sheet for Maker and Country of Origin.
16	Transformer Voltage ratio, Capacity, Vector group, Maker and country of origin (for high voltage side)	2 × [70MVA, 145±2X2.5%/11Kv,Ynd11] 1 × [50MVA, 145±2X2.5%/11kV, Ynd11] Please see attached information sheet for Maker and Country of Origin.
17	Maker and country of origin for switchgear (for low voltage side)	Please see attached information sheet for Maker and Country of Origin.
18	Maker and country of origin for switchgear (for high voltage side)	Please see attached information sheet for Maker and Country of Origin.
19	Island mode	The Power Plant is capable of operating as an Inland mode.
	ice shall be assumed as 9.7346 (USD/MMBtu) to calculate	e the fuel cost (USD/kWh).
	pove data shall be based on the following conditions:	12210/ 10.0/
д.	EPGE SYSTEM VOLTAGE	132kV ±10 %.

2. POWER FACTOR

3. FREQUENCY

0.8 (LAGGING) UP TO (0.9 LEADING)

50 HZ

4. FREQUENCY VARIATION SETTING

(51.5 - 52 Hz, 15 minutes) (51-51.5 Hz, 90 minutes)

(48.5 - 51 Hz, continuous)

(47.5 - 48.5 Hz, 25 minutes) (47 - 47.5 Hz, 30 minutes)

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1. General

The Company shall plan, design, construct and operate the Facility and design and construct the New Transmission Facilities and generally comply with the standards and guidelines of the Agreement and those listed below. This includes obtaining and maintaining all necessary permits and licences for the construction and operation of the Facility and the construction of the New Transmission Facilities.

- (i) Applicable national Myanmar environmental, social and labour laws
- (ii) IFC Performance Standards
- (iii) World Bank Group EHS General Guide lines
- (iv) World Bank Group EHS Guidelines for Thermal Power Plants
- (v) World Bank Group EHS Guidelines for Electric Power and Transmission Distribution
- (vi) IFC Stakeholder Engagement Handbook and other relevant Good Practice Notes
- (vii) IFC Handbook for Preparing a Resettlement Action Plan (if applicable)

The Myanmar Environmental Conservation Law (2012) has been enacted to implement the National Environmental Policy. This law includes principles and guidelines for sustainable development, conservation of clean environment, and preservation of natural and cultural heritage. Under this law regulations and standards will be issued from time to time which the Company will comply with References to "WBG" in this Schedule are to the "World Bank Group".

2. Environmental Impact Assessment and Related Laws

The Company shall prepare an Environmental Impact Assessment (EIA) for the project in accordance with the requirements and regulations of the Ministry of Environmental Conservation and Forestry (MOECAF). The Company shall prepare an Environmental and Social Impact Assessment (ESIA) in accordance with IFC Performance Standards relating to the adequate identification and assessment of project risks and impacts. To the extent practicable, the EIA will be equivalent to the ESIA, with only a single assessment prepared to avoid confusion. If separate assessments are prepared, the Company shall exercise best efforts to minimize inconsistencies between the two documents. The EIA, ESIA and related management plans shall be prepared by Company personnel or external experts with knowledge of IFC Performance Standards 1-8. The Company shall also comply with all relevant environmental protection laws, including but not limited to:

- The Forest Law (1992) The Forest Rules (1995)
- The Protection of Wild Life, Wild Plants and Conservation of Natural Areas Law (1994) Wild Life Protection rules (2002)
- The Protection of Wildlife and Conservation of Natural Areas Law SLORC Law No. 6/94
- The Forest Department Notification No. 583/94



- Environmental Conservation Law (2012) Environmental Conservation Rules (2014)
- National Environmental Policy (1994)
- The Conservation of Water Resources and Rivers Law (2006) Myanmar Agenda 21

3. Standards and Guidelines

The project will comply with all relevant national, WBG and IFC guidelines and standards, with the main applicable WBG guidelines summarized below.

3.1 Air Ermssions Guidelines

The Company shall ensure that the project complies with the combustion emission limits set out in the WBG EHS Guidelines for Thermal Power Plants.

8:3 Ambient Air Guality Guidelines

in the absence of national legislated ambient air quality standards in Myanmar, the Company shall demonstrate, through air dispersion modeling, plant compliance with the World Health Organization (WHO) Ambient Air Quality Guidelines as specified in WBG EHS General Guidelines.

3.3. Noise Levels Guidelines

Working environments (worker exposure): The Facility shall be designed to achieve the noise limits for working environments set out in the WBG EHS General Guidelines.

	Location / Activity	Equivalent Level LA _m 8 hours
1.	Heavy industry (no demand for oral communication)	85 dB(A)
2	Open offices, control rooms, service counters or similar	45 – 50 dB(A)

Source: Table 2.3.1, WBG EHS General

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Guidelines: No employees should be exposed to a noise level greater than the guideline limits detailed above without hearing protection. Noise levels shall be measured according to appropriate International Electrotechnical Commission (IEC) standards.

Ambient conditions (beyond the facility boundary): The Company shall also comply with the background noise level guidelines indicated in the WBG EHS General Guidelines, as set out below.

	One Hour Lang (dBA)	
Receptor	Daytime (07:00 – 22:00)	Night time (22:00 - 07:00)
1. Residential, institutional, educational	55	45

2.	Industrial, commercial	70	70	1
L.,				

Source: Table 1.7.1, WBG EHS General Guidelines.

The WBG EHS General Guidelines require that noise impacts should not exceed the levels presented in Table 1.7.1, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site. Measurements are to be taken at noise receptors located outside the site. The actual permissible noise pressure levels will be confirmed in the EIA/ESIA.

3.4. Effluent Guidelines

The Company shall ensure that applicable environmental regulations, standards and guidelines for waste water discharge and re-use are complied with as well as national and international standards for water quality and effluent management. The table below lists the effluent discharge guideline limits applicable to the Facility as per the WBG EHS Guidelines for Thermal Power Plants. These standards apply to the discharge of effluent at the end of the outlet prior to release into the receiving waters.

Parameter	Maximum Concentration mg/L, except pH and temperature	
1. pH	6-9	
z. TSS	50	
3. Oil and grease	10	
 Total residual chlorine 	0.2	
5. Chromium – total (Cr)	0.5	
6. Copper(Cu)	0.5	
7. Iron (Fe)	1.0	
8. Zinc (Zn)	1:0	
9. Lead (Pb)	0.5	
10. Cadmium (Cd)	0.1	
11. Mercury (Hg)	0.005	
12. Arsenic (As)	0.5	

Source: Table 5, WBG EHS Guidelines for Thermal Power Plants. WBG General EHS Guidelines Table 1.3.1 - Indicative Values for Treated Sanitory Sewage Discharges

Temperature increase by thermal discharge from cooling system Site specific requirement to be established by the Environmental Assessment (EA) Elevated temperature areas due to discharge of once-through cooling water (e.g., 1 Celsius above, 2 Celsius above, 3 Celsius above ambient water temperature) should be minimised by adjusting

intake and outfall design through the project specific EA depending on the sensitive aquatic ecosystem around the discharge point.

4. Labour Requirements

The Company shall ensure that all relevant Myanmar labour laws are complied with, including:

- Employment Restriction Act (1959)
- Employment Statistics Act (1948) Factories Act (1951)
- Labour Organization Law (2011)
- Leave and Holidays Act (1951)
- Payment of Wages Act (1936) Workmen's Compensation Act (1923) Minimum Wage Law (2013)
- Settlement of Labour Dispute Law (2012) Social Security Law (2012)
- Employment and Skill Development Law (2013)

Myanmar has been a member of the International Labour Organization (ILO) since 1948, therefore, the Company shall comply with the following ILO conventions:

- C029 Forced Labour Convention, 1930 (No. 29) 04 Mar 1955 C087 Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) - 04 Mar 1955
- C001 Hours of Work (Industry) Convention, 1919 (No. 1) 14 Jul 1921
- C002 Unemployment Convention, 1919 (No. 2) 14 Jul 1921
- C006 Night Work of Young Persons (Industry) Convention, 1919 (No. 6) 14 Jul 1921
- CO11 Right of Association (Agriculture) Convention, 1921 (No. 11) 11 May 1923
- C014 Weekly Rest (Industry) Convention, 1921 (No. 14) 11 May 1923
- CO15 Minimum Age (Trimmers and Stokers) Convention, 1921 (No. 15) 20 Nov 1922
- CO16 Medical Examination of Young Persons (Sea) Convention, 1921 (No. 16) 20 Nov 1922
- CO17 Workmen's Compensation (Accidents) Convention, 1925 (No. 17) 16 Feb 1956
- C018 Workmen's Compensation (Occupational Diseases) Convention, 1925 (No. 18) 30 Sep 1927
- CO19 Equality of Treatment (Accident Compensation) Convention, 1925 (No. 19) 30 Sep 1927
- CO21 Inspection of Emigrants Convention, 1926 (No. 21) 14 Jan 1928
- C026 Minimum Wage-Fixing Machinery Convention, 1928 (No. 26) 21 May 1954
- CO27 Marking of Weight (Packages Transported by Vessels) Convention, 1929 (No. 27) 07 Sep 1931
- C042 Workmen's Compensation (Occupational Diseases) Convention (Revised), 1934 (No. 42) 17 May 1957
- C052 Holidays with Pay Convention, 1936 (No. 52) 21 May 1954

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C063 - Convention concerning Statistics of Wages and Hours of Work, 1938 (No. 63)

Excluding Parts III and IV -24 Nov 1961, The Company shall also comply with the provisions of IFC

Performance Standard 2 Labor and Working Conditions, which includes provisions relating to general working conditions, workers organisations, non-discrimination and equal opportunity, retrenchment, the provision of a grievance mechanism, and the prohibition of child labor and forced labor.

5. Other Applicable Laws and Guidelines

The Company is responsible for ensuring that other national laws that may be applicable to the

Facility are adhered to:

- Land Acquisition Act (1894)
- The Farmland Act (2012)
- Towns Act (1907) (as amended) Village Act (1908) (as amended)
- Protection of the Right of Cultivation Act (1963) Tenancy Law (1963) and Tenancy (Amendment) Law (1965)

If land acquisition and/or resettlement is required, the Company shall adhere to the provisions of IFC.

Performance Standard 5 Land Acquisition and Involuntary Resettlement.

6. Permits

The Company is responsible for obtaining and maintaining all the necessary permits and licenses for the construction, operation and decommissioning of the Facility. The Company is responsible for identifying, obtaining and maintaining all necessary Permits and Licenses to construct and operate the Facility. MEPE shall give reasonable assistance to the Company in obtaining such permissions and clearances from the relevant authorities.

7. Environmental and Social Management System

The Company shall prepare an Environmental and Social Management System (ESMS) for the project in accordance with the IFC Performance Standards.

Annex 10 Invoice format

Company Name : Address : Phone No :

Attn 4	Managing Dieactor	PROFORMA INVOICE	Invoice Number		:
	to: General Manager (Finance	department)	Invoice Date :		
	Engineer (Thermal power dep		Due Date		:
	ic Power Generation Enterpris	•	Contract		* *
	ry of Electricity and Energy				
	Naypyitaw.				
	blic of the union of Myanmar				
No.		Description			Total
		t in xxx , Republic of Union o	f Myanmar.		
	Power Electricity Product				
1.	-	x MWh		ммк	xxx
	Tariff : xx	x USD / MWh			
	(Inlouding Commercial Tax 5%	and Withholdings Tax 2.5%)			
	· •	USD = xxx Myanmar Kyats (
2.	Less 2.5 % Withholdings Tax			ммк	(xxx)
3.	Amount Now Due			ммк	xxx
		PAYMENT TERMS			
I. Pay	ment shall be made based on th	e above currency MMK			
2. Pay	ment shall be made in the full a	mount			
3. The	above payment can be made b	y transfer cheque			
1. TR	ANSFER shall be made to:				
Ace	count Number :				
Ace	count Name	:			
Sw	vift Code	: (if applicable)			
5. <u>Ba</u>	n <u>k Detail</u>				
Ba	nk Name	:			
		Seal & Signature of			
		Authorized Persons			

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Ame of Feeder Master (Main) Energy Meter Meter EPGE's No. XXXXXX Manufacturer's Sr: No XXXXXX Date Time Date Time Company Name) Signature Signature of Company Name)	Department

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Gas Consumption Record Table of

(Company Name) in region) MW Gas-Fired Electricity Generating Plant of

For the month of $(\infty, 20\infty)$

Back Up Meter (MMCF)	Consumption	
Back Up Me	Meter Reading	
Main Meter (MMCF)	Consumption	
Main Met	Meter Reading	
Back Up Meter (MMCF)	Consumption	
Back Up Me	Meter Reading	
Main Meter (MMCF)	Consumption	
Main Met	Meter Reading	
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Dato		

Representative of (Company Name)

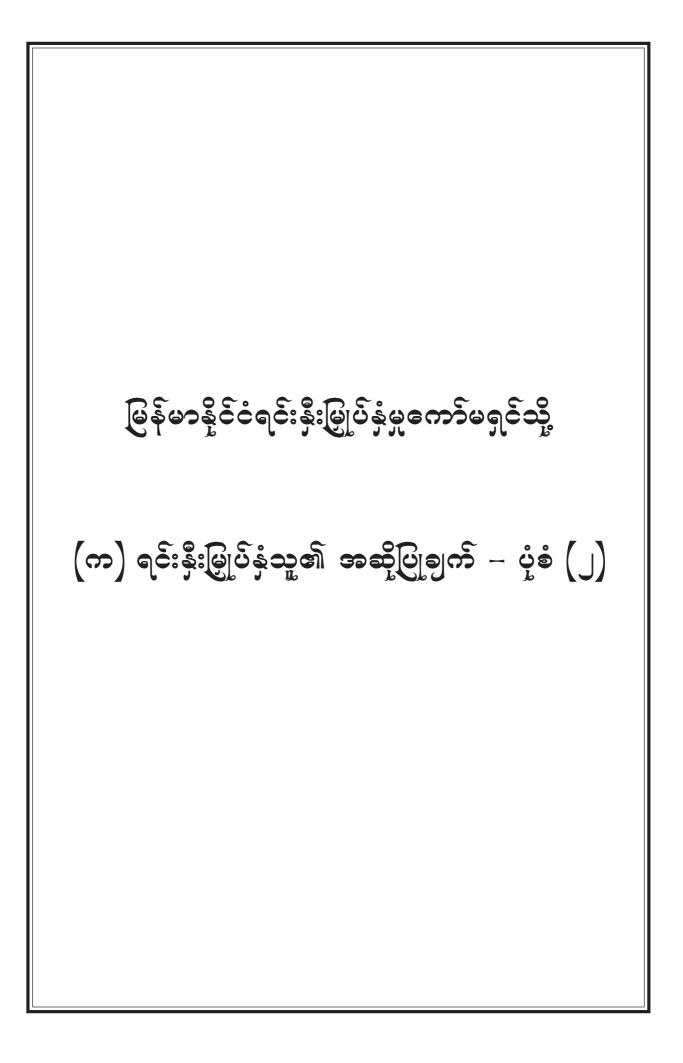
Representative of Electric Power Generation Enterprise , MOEE

Myanma Oil and Gas Enterprise, MOEE

Representative of

-----------------11111111 Designation Department Signature Name

Q9,



အဆိုပြုချက်

သို့

ဥက္ကဋ္ဌ မြန်မာနိုင်ငံရင်းနီးမြှုပ်နှံမှုကော်မရှင်

စာအမှတ် ၊ PGK/KS-135/MIC-/2018 ၊ ၂ဂ **၁၈** ခုနှစ်၊ **ဩဂုတ်** လ ရက် ရက်စွဲ ကျွန်တော်/ကျွန်မသည် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေပုဒ်မ ၃၆ နှင့်အညီ ပြည်ထောင်စုသမ္မတ မြန်မာနိုင်ငံတော်အတွင်း ရင်းနှီးမြှုပ်နှံမှုပြုလုပ်လိုပါသဖြင့် ခွင့်ပြုပါရန် အောက်ပါအချက်အလက်များ ကိုဖော်ပြ၍ လျှောက်ထားအပ်ပါသည်-

ЛС

ရင်းနီးမြှုပ်နံသူ၏ -

(က) အမည်
(၈) အဖအမည် (ခ) အဖအမည်
(ဂ) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ်/ ၁၂/လသန(နိင်)ဟစၥဂု၄
နိုင်ငံကူးလက်မှတ်အမှတ်
(ဃ) နိုင်ငံသား မြန်မာနိုင်ငံသား
(c) နေရပ်လိပ်စာ
(၁) ပြည်တွင်း အမှတ်(စီ-၄)၊ မွန်မြတ်မေတ္တာလုံးခြင်းအိမ်ယာ၊ ပင်ရွှေညောင်လမ်း၊ တာမွေမြို့နယ်၊ ရန်ကုန်မြို့။
(၂) ပြည်ပ
(စ) တယ်လီဖုန်း /ဖက်စ် ၊၁-၈၆၁၀၆၅၄၊၀၁-၈၆၁၀၆၅၆ / ဖက်စ်၀၁-၂၉၅၀၆၇
(ဆ) အီးမေးလ်လိပ်စာ maungkyay@national-infra.com
(ဇ) ပင်မကုမ္ပဏီအမည် နေရှင်နယ်အင်ဖရာစထရက်ချာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပကီလိမိတက် (NIHC)
(ဈ) ပင်မကုမ္ပဏီတည်ရှိရာလိပ်စာ အမှတ်(၃၆)၊သိမ်ဖြူလမ်း၊ပုဇွန်တောင်မြို့နယ်၊ရန်ကုန်မြို့။
(ည) လုပ်ငန်းအမျိုးအစား (၁၄၅.၄၉)မဂ္ဂါပင်လျှပ်စစ်ဓါတ်အားပေးစက်ရုံတည်ဆောက်/လည်ပတ်ပြုပြင်ထိန်းသိမ်း ခြင်းလုပ်ငန်း

(ဃ) နိုင်ငံသား

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- (လျှောက်ထားသူသည် စီးပွားရေးအဖွဲ့အစည်းဖြစ်ပါက) မှတ်ချက်။ တရားဝင်ကိုယ်စားလှယ်လွှဲစာပူးတွဲတင်ပြရန် (ဂ) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ်/နိုင်ငံကူးလက်မှတ်အမှတ်
- (ခ) ဆက်သွယ်ရမည့်ပုဂ္ဂိုလ်အမည် ------
- ရင်းနှီးမြှုပ်နှံသူကိုယ်တိုင် လျှောက်ထားခြင်းမဟုတ်ပါကလျှောက်ထားသူ၏ -(က) အမည် -----
- (မိတ္တူ) (၃) အဆိုပြုလုပ်ငန်းတွင် ပါဝင်လိုသူများ၏ လုပ်ငန်းပိုင်းနှင့် ငွေရေး ကြေးရေး ဆိုင်ရာအထောက်အထားများ
- (၂) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ် (မိတ္တူ) နှင့် နိုင်ငံကူးလက်မှတ်
- (၁) ကုမ္ပဏီမှတ်ပုံတင်အထောက်အထားများ (မိတ္တူ)

တင်ပြရန် -

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(ဆ) ပင်မကုမ္ပဏီတည်ရှိရာလိပ်စာ **မှတ်ချက်။** အထက်အပိုဒ် ၁၊ ၂ တို့နှင့် စပ်လျဉ်း၍ အောက်ပါအချက်များကို ပူးဝ

- (၂) ပြည်ပ <u>No-882-1, Tong'an Road, Laoshan District, Qingdao, China.</u>
- (c) နေရပ်လိပ်စာ (၁) ပြည်တွင်း MCM - အမှတ် - ၁၁၂၀-၁၁၂၁၊ သုမင်္ဂလာလမ်း၊ ၁၆/၄ ရပ်ကွက်၊ သင်္ကန်းကျွန်းမြို့နယ်၊ ရန်ကုန်။
- (ဃ) နိုင်ငံသား MCM (မြန်မာ), SEPCOIII (တရုတ်)

(စ) ပင်မကုမ္ပဏီအမည်.....

- MCM ကုမ္ပက်ိမှတ်ပုံတင်အမှတ် -၆၆၈/၂၀၀၁-၂၀၀၂ (ဂ) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ်/ SEPCOIII Company Registration No - 913702121654224203 နိုင်ငံကူးလက်မှတ်အမှတ်
- (က) အမည် မြန်မာဓာတုဗေဒနှင့်စက်ပစ္စည်းကုမ္ပကီလိမိတက် (MCM) SEPCOIII Electric Power Construction Co.,Ltd (SEPCOIII) (ခ) အဖအမည်

သင်းဖွဲ့မှတ်တမ်း/သင်းဖွဲ့စည်းမျဉ်း သို့မဟုတ် ဖွဲ့စည်းပုံအခြေခံစည်းမျဉ်း မုတ်ချက်။ ပူးတွဲ တင်ပြရန်

- (ခ) အစုရှယ်ယာအမျိုးအစား <u>1 share = USD 1, Shares = 1,000,000</u>
- (က) ခွင့်ပြုမတည်ငွေရင်း USD One Million
- ကုမ္ပဏီဖွဲ့စည်းခြင်းနှင့်သက်ဆိုင်သောအချက်အလက်များ

စဉ်	အစုရှယ်ယာရှင်အမည်	နိုင်ငံသာ:	အစုရှယ်ယာပိုင်ဆိုင်မှု <i>%</i>
э	National Infrastructure Holdings Co.,Ltd	မြန်မာ	୭၄%
	Myanmar Chemical and Machinery Co.,Ltd	မြန်မာ	୧୧%
9	SEPCOIII Electric Power Construction Co.,Ltd	တရုတ်	၉%

၆။ အစုရှယ်ယာရှင်များစာရင်း

၅။

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ဖွဲ့စည်းမည့် စီးပွားရေးအဖွဲ့ အစည်းပုံသဏ္ဍာန် ြ ရာခိုင်နှုန်းပြည့် ြ ဖက်စပ်ပြုလုပ်ခြင်း (ဖက်စပ်စာချုပ်မူကြမ်းတင်ပြရန်) ြ အခြားသဘောတူညီချက်ပုံစံတစ်မျိုးမျိုးဖြင့်ဆောင်ရွက်ခြင်း (စာချုပ်မူကြမ်းတင်ပြရန်)

(င) မြန်မာနိုင်ငံတွင်နေထိုင်သည့် နေရပ်လိပ်စာ (စ) တယ်လီဖုန်း /ဖက်စ် (ဆ) အီးမေးလ်လိပ်စာ ၄။ ရင်းနှီးမြှုပ်နှံမှုပြုလုပ်လိုသည့် လုပ်ငန်းအမျိုးအစား

		ကျပ်/US\$(သန်းပေါင်း)
(က) ပြည်တွင်းမှထည့်ဝင်မည့် မတည်ငွေ	ရင်း <u>K</u>	s - 16,804.86 (13%) / US\$ - 12.00
ပမာဏ/ ရာခိုင်နှုန်း		
(ခ) နို င်ငံခြား မှ ယူဆောင်လာမည့် မတဉ	ပ်ငွေရင်း ^K	s - 112,944 (87%) /US \$ - 80.68
ပမာဏ/ ရာခိုင်နှုန်း		
စုစုပေါင်း	K	s - 129,749.37 / US \$ - 92.68
(ဂ) အဆိုပြုမတည်ငွေရင်းနှစ်အလိုက်ထ တစ်နစ်	ည့်ဝင်မည့်အခြေအ	နေ /ယူဆောင်လာမည့်ကာလ
(ဃ) ရင်းနှီးမြှုပ်နှံမှုတန်ဖိုး/ပမာဏ	USD 92.68 Mil	lion ဌာနမှသက်တမ်းတိုးရန်ဆန္ဒရှိပါက (သို့)
(င) ရ င်းနီးမြှုပ် နှံမှုပြုလုပ်လိုသည့် သက်ထ	ညည်း ပြည်နယ်တိုင်းဒေး	ဌာနမှ သက်တခေးတိုးရန်သန္ဒရှစ်က (သု.) သကြီးရှိ စက်မှုစုံ/အထူးစီးပွားရေးစက်မှုဇုံ ပိုအဝိချက်များ တစ်ဖက်တစ်လမ်းဖြည့်ဆည်း
(စ) ရ င်းနှီး မြှုပ်မှုလုပ်ငန်းတည်ဆောက်မှု	ကာလသို့မဟုဇ်ဘီစြီ	ပိုဒီနိုင်ရိက်များ တစ်ကေတစ်လမ်းဖြည့်ဆည်း စတ်လဏ်ရင်းနှီးမြှုပ်နံမည့်ကာလ ငြ ဆင်မှု က်ဘလ
မှတ်ချက်။ အပိုဒ် ၈(င) နှင့် စပ်လျ		
တွဲဖြင့် ဖော်ပြပါရန်		
၉။ နိုင်ငံခြားမှ ယူဆောင်တင်သွင်းလာမည့် မဝ	ာည်ငွေရင်း၏ အခေ	သးစိတ်စာရင်း-
	နိုင်ငံခြားငွေ	ညီမျှသည့်ခန့်မှန်းငွေကျင်
	(သန်းပေါင်း)	(သန်းပေါင်း)
(က) နိုင်ငံခြားငွေ		
(အမျိုးအစားနှင့် တန်ဖိုးပမာဏ)	1	
(ခ) စက်ပစ္စည်းများ၊ စက်ကိရိယာများ	74.04	
စသည့်ပစ္စည်းတို့၏ တန်ဖိုးပမာဏ	74.94	104,912.34
(အသေးစိတ်စာရင်းပူးတွဲတင်ပြရန်)		
(ဂ) ကနဦးကုန်ကြမ်းပစ္စည်းများနှင့်		
အခြားအလားတူပစ္စည်းများ၏		
တန်ဖိုးပမာဏ		
(အသေးစိတ်စာရင်းပူးတွဲတင်ပြရန်)		*
(ဃ) လိုင်စင်၊ တီထွင်မှုပိုင်ဆိုင်ခွင့်၊		
စက်မှုဒီဖိုင်း၊ကုန်အမှတ်တံဆိပ်၊		
မူပိုင်ခွင့် စသည့် အသိဉာဏ်		
		·,

မတည်ငွေရင်းနှင့်သက်ဆိုင်သည့်အချက်အလက်များ -6) II

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- 9 -

	F 74	8,032.18	
နည်းပညာရပ်များ၏	۲٬۰۲		
00			
ပစ္စည်းများ)		4	A generation and a second second
		112,944	
စုစုေပါင္း အပိုဒ် ၉ (ဃ) (င) င	ဂို ့နှင့် စပ်လျဉ်း၍	အသုံးပြုခွင့်အထောက်ဒ	အထားများ
ပူးတွဲ တင်ပြရန်။	1		
ာင်မည့် မတည်ငွေရင်းဇ	။ အသေးစိတ်စာမ	ရင် :-	
		ကျပ်(သန်းပေါ်	lố:)
		6,196.99	
ကိရိယာများတန်ဖိုးပမာ	m		
ဂ် စာရင်းပူးတွဲတင်ပြရန်)		
ဂက်အအုံ တန်ဖိုး သို့မပ	၇တ် ငှားရမ်းခ	10 547 97	
အအုံဆောက်လုပ်မှုကုန်ဖ	ကျစရိတ်	10,547.87	
င့် လုပ်ငန်းသုံးပစ္စည်းမျ	p:		
α			
ဢ ်စာရင်းပူးတွဲတင်ပြရန်)		
ကြမ်းပစ္စည်းတန်ဖိုးပမ			
ဘ်စာရင်းပူးတွဲတင်ပြရ ^န	()		
		60	
	စုစုပေါင်း အဝိုဒ် ၉ (ဃ) (င) င ပူးတွဲ တင်ပြရန်။ တင်မည့် မတည်ငွေရင်း၏ ကိရိယာများတန်ဖိုးပမာ ကိစာရင်းပူးတွဲတင်ပြရန် လုပ်ငန်းသုံးပစ္စည်းမှ ကာ ဘစာရင်းပူးတွဲတင်ပြရန် ကြမ်းပစ္စည်းတန်ဖိုးပမ	သာ မာ့-ဆောက်လုပ်ရေး ပစ္စည်းများ) စုစုပေါင်း အပိုဒ် ၉ (ဃ) (င) တို့နှင့် စပ်လျဉ်း၍ ပူးတွဲ တင်ပြရန်။ သင်မည့် မတည်ငွေရင်း၏ အသေးစိတ်စာ ကိရိယာများတန်ဖိုးပမာဏ ကိရိယာများတန်ဖိုးပမာဏ ကိရိယာများတန်ဖိုးပမာဏ ကိရိယာများတန်ဖိုးပမာဏ ကိရိယာများတန်ဖိုးပမာဏ ကိရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ ကိုရိယာများတန်ဖိုးပမာဏ	နည်းပညာရပ်များ၏ <u>5,74</u> အ မှာ-ဆောက်လုပ်ရေး ပစ္စည်းများ) စုစုပေါင်း <u>112,944</u> အဝိုဒ် ၉ (ဃ) (င) တို့နှင့် စပ်လျဉ်း၍ အသုံးပြုခွင့်အထောက်ရ ပူးတွဲ တင်ပြရန်။ တင်မည့် မတည်ငွေရင်း၏ အသေးစိတ်စာရင်း- ကျပ်(သန်းပေါ 6,196.99 ကိရိယာများတန်ဖိုးပမာဏ ဂိစာရင်းပူးတွဲတင်ပြရန်) ကက်အအုံ တန်ဖိုး သို့မဟုတ် ငှားရမ်းခ အအုံဆောက်လုပ်မှုကုန်ကျစရိတ် <u>10,547.87</u> က ကိစာရင်းပူးတွဲတင်ပြရန်) ကြမ်းပစ္စည်းတန်ဖိုးပမာဏ ကိစာရင်းပူးတွဲတင်ပြရန်)

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12

- ၅ -

ဆိုင်ရာပစ္စည်းများကိုတန်ဖိုး

တန်ဖိုးပမာဏ

ဖြတ်နိုင်သောအခွင့်အရေးများ၏

90#	ချေးငွေနှင့်သက်ခ		အလက်များ -		
	🛛 ပြည်တွင်း	ချေးငွေ			ကျပ်
					မေရိကန်ဒေါ်လာ
	🛛 ပြည်ပချေး	GC	63.86		၈မေရိကန်ဒေါ်လာ
ာ၂။	ဆောင်ရွက်မည့် စီ	းပွားရေးအဖွဲ့အဖ	ာည်းနှင့် သက်ဆိုင်သော	အချက်အလက်မျ	0:-
			သ(များ)/တည်နေ ရာ စဆည်စရိုင်၊ စဉ့်ကိုင်မြို့နယ်။		
	(ခ) မြေသို့မဟုင	ာ် မြေနှင့်အဆေး	ာက်အအုံနေရာအမျိုးအ	စားနှင့် အကျယ်အ	ခဝန်းလိုအပ်ချက်
	(၁) တည်ရ	နေ ရာမွန္တလေးတိုင်းဖ	ဒေသကြီး၊ ကျောက်ဆည်ခရိုင်၊ စဉ်	ကိုင်မြို့နယ်၊ ၂၃၀ကေဗေ	ဘဲလင်းဓာတ်အားခွဲရုံပန်းပ
	(၂) မြေ/အ	ဆောက်အအုံအဖ	ကျယ်အဝန်း၊အရေအတွ	က် (၁၀.၁၂) စဂ	D
	(၃) လက်ရှိ	ပိုင်ဆိုင်သူ	လျှပ်စစ်နှင့် စွမ်းအင်ဂန်ကြီးဌား	۶	
	(ကက)) အမည်/ ကုမ္ပဏ	ဂီအမည်/ဌာန		
			ရေးကတ်အမှတ်		-
	(იი)	နေရပ်လိပ်စာ			
	(၄) မြေအမ	ါ်းအစား			
	(၅) မြေငှား	ဂရန် ခွင့်ပြုကား			
					ထိ ()နှစ်
			-		· · · J
	(ကက)	မြေ			
			·····		
	(၁၀) ပြည်နပ	S/တိုင်းဒေသကြီ	jä		
			အမည်/ဌာန		
		and a state of the			
			တ်အမှတ်/		
		နိုင်ငံသားစိစစ်ခ	-	· .	
		1	Trun or co Aor		

- 6 -

မှတ်ချက်။ အောက်ဖော်ပြပါ ဖော်ပြချက်များပူးတွဲဖော်ပြရန် (၁) လုပ်သားများ၏ လူမှုဖူလုံရေး၊သက်သာချောင်ချိမှုဆောင်ရွက်မည့် အစီအမံများ

စဉ်	အဆင့်အတန်း	မြန်မာနိုင်ငံသား	နိုင်ငံခြားသား	စုစုပေါင်:
ျ (က)	အကြီးတန်းစီမံခန့်ခွဲမှု		C	Э
()	(မန်နေဂျာများ၊ အဆင့်မြှင့်အရာရှိများ)			
(၃)	အခြားအဆင့်စီမံခန့်ခွဲမှု	ອ	J	2
	(အကြီးတန်းစီမံခန့်ခွဲမှုမှအပ)			<u> </u>
(0)	သက်မွေးဝမ်းကျောင်းပညာရှင်များ	0	о о	J
(ಬ)	နည်းပညာနှင့်ဆက်စပ်သည့်သက်မွေးပညာရှင်	2	J	ି
(c)	အကြံပေး			
(0)	ကျွမ်းကျင်လုပ်သား	၁၇		၁၇
·(ဆ)	အခြေခံလုပ်သား	G		G
(ಮ)	စုစုပေါင်း	၃၆	G	9J

၁၄။ ဆောင်ရွက်မည့် စီးပွားရေးအဖွဲ့အစည်းတွင် လိုအပ်မည့် ဝန်ထမ်းများစာရင်း Exhibit No.X

- (ဂ) ဘဏ်စာရင်းအမှတ် (မိခင်နိုင်ငံရှိဘဏ်ထောက်ခံချက် သို့မဟုတ် မိခင်ကုမ္ပဏီ၏စာရင်းစစ်ပြီးသည့် နှစ်ချုပ် စာရင်းပူးတွဲတင်ပြရန်)
- (ခ) နိုင်ငံသားစိစစ်ရေးကတ်အမှတ်/နိုင်ငံကူးလက်မှတ်အမှတ်.....
- (က) အမည်/ ကုမ္ပဏီအမည်
- ၁၃။ ငွေကြေးပိုင်ဆိုင်မှုနှင့် ပတ်သက်၍ အသေးစိတ်ဖော်ပြချက်-
- (၂) မြေငှားစာချုပ်(မူကြမ်း)

မှတ်ချက်။ အပိုဒ်၁၂(ခ)နှင့်စပ်လျဉ်း၍အောက်ပါအချက်များပူးတွဲတင်ပြရန်-(၁) မြေပိုင်ဆိုင်မှု/မြေဂရန်အထောက်အထား(စက်မှုဇုန်မှ အပ)နှင့်မြေပုံ

- (စ) နှစ်စဉ် ရေလိုအပ်ချက်.....
- (c) နှစ်စဉ် လျှပ်စစ်ဓါတ်အားလိုအပ်ချက်
- (ဃ) နှစ်စဉ်ထုတ်လုပ်မည့် ကုန်ပစ္စည်း/ဝန်ဆောင်မှု
- (၂) အကျယ်အဝန်း
- (၁) အဆောက်အအုံအမျိုးအစား/အရေအတွက်
- (cc) နေရပ်လိပ်စာ (ဂ) ဆောက်လုပ်မည့်အဆောက်အအုံလိုအပ်ချက်
- 5 -

(၂) ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်မည့် အစီအမံများ

၁၅။ အဆိုပြုချက်နှင့်အတူအောက်ဖော်ပြပါ လျှောက်ထားလွှာများကိုတင်ပြလျှောက်ထားခြင်းရှိ/ မရှိဖော်ပြရန် -

🗌 မြေအသုံးပြုခွင့်လျှောက်ထားလွှာ

ရက်စွဲ----

🗌 အခွန်ကင်းလွတ်ခွင့်သို့မဟုတ် သက်သာခွင့်လျှောက်ထားလွှာ

၁၆။ အဆိုပြုရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်းအကျဉ်းချုပ်အား နောက်ဆက်တွဲဖြင့် ဖော်ပြရန်။

လျှောက်ထားသူ	လက်မှတ်	X.
	-	ဦးမောင်ကျေး
	ရာထူး	မန်နေးဂျင်းဒါရိုက်တာ
ဌာန/ကုမ္ပ	ဏီတံဆိပ်	PowerGen Kyaukse Co.,Ltd

	အဆိုပြုရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်းအကျဉ်း	ချုပ်(_န ည်းဥပဒေ ၃၈)
Oll	ရင်းနှီးမြှုပ်နှံမှုတွင် တိုက်ရိုက်ဖြစ်စေ၊ သွယ်ဝိုက်၍	ဖြစ်စေ အကျိုးစီးပွား သိသာထင်ရှားစွာ
	ပါဝင်သော အခြားပုဂ္ဂိုလ်များဖော်ပြရန် -	
	(က) ရင်းနှီးမြှုပ်နှံသူမှ ရရှိမည့် အမြတ်ငွေ ၏ ၁၀ % သို့မဟုတ် ထိန်းချုပ်ခွင့်ရှိသည့် လုပ်ငန်း၏ - (၁) အမည် (၂) ဆက်သွယ်ရမည့်လိပ်စာ (၃) မှတ်ပုံတင်အမှတ်	_{နှ} င့် အထက်ကို ပိုင်ဆိုင်ခွင့်ရှိသည့် ပူးတွဲတင်ပြအပ်ပါသည်။
)	(တစ်ဦး ထက်ပိုပါက နောက်ဆက် တွဲဖြင့် ဖော်ပြရန်)	
	(ခ) ခွင့်ပြုမည့်ရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်းဆောင်ရွက်ရာ ကုမ္ပဏီများရှိလျှင် အဆိုပါကုမ္ပဏီများ၏အမည်	ဘွင်တိုက်ရိုက်ပါဝင်သည့် လက်အောက်ခံ ကို ဖော်ပြရန် -
	(c) Myanmar Chemical & Machinery Compa SEPCO III Electric Power Construction	any Limited
յ။	(၃) ရင်းနှီးမြှုပ်နှံမှု၏ အဓိကတည်နေရာ သို့မဟုတ် တည်နေရာများ	မွန္တလေးတိုင်းဒေသကြီး၊ ကျောက်ဆည်မြို့နယ်၊ ၁ <u>ဉ</u> ကိုင်မြို့နယ်၊(၂၃ဂ)ကေဗေဘဲလင်းဓါတ်အားခွဲရုံပန်းတွင်း
)	· · ·	
ŚII	ရင်းနှီးမြှုပ်နှံမှုလုပ်ငန်းပြုလုပ်မည့်ကဏ္ဍနှင့် - ဆောင်ရွက်မည့်စီးပွားရေးလုပ်ငန်းများ - ဖော်ပြချက် -	(၁၄၅.၄၉) မဂ္ဂါပပ် လျပ်စစ်ဓါတ်အားပေးစက်ရုံ တည်ဆောက်/လည်ပတ် ပြုပြင်ထိန်းသိမ်းခြင်းလုပ်ငန်း
.9II	အဆိုပြုထားသော ရင်းနှီးမြှုပ်နှံမှုပမာဏ (မြန်မာကျပ် နှင့် အမေရိကန်ဒေါ်လာ တို့ဖြင့် _ ဖော်ပြရန်)	USD 92.68 million နှင့်ညီမျှသော ကျပ်သန်း (၁၂၉,၇၄၉.၃၇)

4

၅။ ရင်းနှီးမြှုပ်နှံမှု အကောင်အထည်ဖော်မည့် ခန့်မှန်းအချိန်ဖယား အပါအဝင် အစီအစဉ်ဖော်ပြချက်-

- (က) တည်ဆောက်ရေးကာလသို့မဟုတ် ပြင်ဆင်မှုကာလ(နှစ်၊လတို့ဖြင့်ဖော်ပြရန်)
- စတင်ခွင့်ပြုချိန်မှ ရက်ပေါင်း (၂၈၆) ရက် ၂၀၁၉ စုနှစ်၊ ဖေဖော်ဂါရီလ (၁၇) ရက်

(ခ) စီးပွားဖြစ်စတင်မည့်ကာလ (နှစ်၊လတို့ဖြင့်ဖော်ပြရန်)

၆။ ခန့်ထားမည့် အလုပ်သမားဦးရေ -

- (က) ပြည်တွင်း
- (ခ) ပြည်ပ (ပညာရှင်/ကျွမ်းကျင်သူ)
- ၇။ ပြည်ပမှ ပြည်တွင်းသို့ ယူဆောင်လာမည့် မတည် ရင်းနှီးမြှုပ်နှံမှုများတွင် ငွေသားဖြင့် ယူဆောင်မှု ပမာဏ (Capital in-Cash)၊ ရင်းနှီးပစ္စည်း အဖြစ်ယူဆောင် လာမည့် ရင်းနှီးငွေပမာဏ (Capital in-Kinds) တို့အား တိကျစွာခွဲခြားသတ်မှတ် ဖော်ပြပေးရန်(မြန်မာကျပ် _{နှ}င့် အမေရိကန် ဒေါ်လာ တို့ဖြင့်ဖော်ပြရန်) -

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(က) ငွေသားဖြင့်ယူဆောင်မှုပမာဏ USD (5.75) Million	
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(ခ) ပစ္စည်းအဖြစ်ယူဆောင်လာမည့် USD (74.94) Million ရင်းနှီးငွေပမာဏ

မှတ်ချက်။ ရင်းနှီးမြှုပ်နှံသူသည် ရင်းနှီးမြှုပ်နှံမှုနှင့် သက်ဆိုင်သော လျှို့ဝှက်ထိန်းသိမ်းရမည့် သတင်း အချက်အလက်များအား ထုတ်ပြန်ခြင်းမှ ရှောင်ကြဉ်ရန် ကော်မရှင်ထံ တင်ပြတောင်; ဆိုနိုင်သည်။

ကတိဝန်ခံချက်

အထက်ဖော်ပြပါ လျှောက်ထားသူမှပေးအပ်သည့် အချက်အလက်များအားလုံးသည် မှန်ကန်မှု ရှိပါကြောင်းအာမခံပါသည်။

ဤအဆိုပြုချက်တွင် ခွင့်ပြုမိန့်ထုတ်ပေးရန်အတွက် ကော်မရှင်မှ စိစစ်ရာ၌ လိုအပ်သည့် အချက်အလက်များကို လျှောက်ထားသူကပေးအပ်ရန် ပျက်ကွက်ပါက အဆိုပြုချက်ကို ငြင်းပယ်ခြင်း သို့မဟုတ် စိစစ်ရာ၌ မလိုလားအပ်သည့် နှောင့်နှေးကြန့်ကြာခြင်းတို့ ဖြစ်ပေါ်နိုင်ကြောင်း ကောင်းစွာ သဘောပေါက်နားလည်ပါသည်။

မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်မှ ချမှတ်မည့် စည်းမျဉ်းစည်းကမ်းများကိုလည်း လိုက်နာ မည်ဖြစ်ကြောင်းဝန်ခံကတိပြုအပ်ပါသည်။

	/	Χ.
လျှော်ကိ	ထားသူလက်မှတ်	
အမည်	ဦးမောင်ကျေး	
ရာထူး	မန်နေဂျင်းဒါရိုက်တာ	
ဌာန/ကု	မ္ပဏီတံဆိပ် <u>PowerGen Kyauks</u>	e Co.,Ltd

Proposal Form

To,

Chairman

Myanmar Investment Commission

Reference No. PGK/KS-135/MIC- /2018 Date. 2018 August

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I do apply for the permission to make investment in the Republic of the Union of Myanmar in accordance with the Section 36 of the Myanmar Investment Law by furnishing the following particulars:-

1. The Investor's:-

- (a) Name U Maung Kyay
- (b) Father's name U Khin Ngar @ U Khin Shein

(c) ID No./National Registration Card No./Passport No. 12/LaThaNa(N)018174

- (d) Citizenship Myanmar
- (e) Address:

(i) Address in Myanmar No.(C-4),Mon Myat Myit Thar Residence,Pin Shwe Nyaung Street, Tamwe Township,Yangon.

- (ii) Residence abroad
- (f) Phone /Fax Ph: 01-8610654,8610656/ Fax : 01-295067
- (g) E -mail address maungkyay@national-infra.com
- (h) Name of principle organization National Infrastructure Holdings Co.,Ltd (NIHC)
- (i) Type of Business Electricity Generation
- (j) Principle company's address: No.(36), Thein Phyu Street, Pazundaung Township, Yangon.

2. If the investment business is formed under Joint Venture, partners':-

- (a) Name Myanmar Chemical and Machinery Co.,Ltd (MCM)
- (b) Father's name SEPCOIII Electric Power Construction Co.,Ltd (SEPCOIII)

(c) ID No./ National Registration Card No./Passport MCM Company Registration No- 668/2001-2002 SEPCOIII Company Registration No - 913702121654224203

(d) Citizenship MCM (Myanmar), SEPCOIII (Chinese)

Address: (e) MCM - No.1120-1121, Thumingalar Street, 16/4 Ward, Thingangyun Address in Myanmar T/W, Yangon. (i) SEPCOIII- No.882/1, Tong'an Road, Laoshan District, Qingdao,China. (ii) Residence abroad Parent company (f) Parent company's address . (g)

Note: The following documents need to be attached according to the above paragraph (1) and (2):-

- (1) Company registration certificate (copy);
- National Registration Card (copy) and passport (copy); (2)
- Evidences about the business and financial conditions of the participants of t (3)proposed investment business;

If the investor don't apply for permission to make investment by himself/herself, the applicant: 3.

- -(a) Name Name of Contact Person (b)
 - (if applicant is business organization)

Remark: To submit the official letter of legal representative as attachment

ID No./ National Registration Card No./Passport No. (c)

- (d) Citizenship
- Address in Myanmar : (e)
- (f) Phone / Fax :
- (g) E-mail:
- Type of proposed investment business:-4.

Type of business organization to be formed:-5.

> One Hundred Percent Joint Venture (To attach the draft of JV agreement)

Type of Contractual basis (To attach contract (agreement) draft)

List of shareholders

6.

No	Name of Shareholder	Citizenship	Share Percentage
1	National Infrastructure Holdings Co.,Ltd	Myanmar	54%
2	Myanmar Chemical & Machinery Co.,Ltd	Myanmar	37%
3	SEPCOIII Electric Power Construction Co.,Ltd	Chinese	· 9%

		- 3 -		anat
7.	Partic	culars of Company incorporation		
	(a)	Authorized Capital USD - One Million		
	(b)	Type of Share 1 uSD, Share	are = 1,000,000	
	(c)	Number of Shares		
	Note	: Memorandum of Association and Article submitted with regard to above paragraph		e Company shall b
8.	Partic	culars of Paid-up Capital of the investment bu	siness	
0.1			Kyat/U	S\$ (Million)
	(a)	Amount/percentage of local capital	16,804.86 (1	3%)/ US \$ - 12.00
		to be contributed		
Ę	(b)	Amount/percentage of foreign capital	112,944 (87%	6) / US \$ - 80.68
	(-)	to be brought in		
		. Total	129,749.37	US \$ - 92.68
	(c)	Total Annually or period of proposed capital to be One Year		US \$ - 92.68
	(c) (d)	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million	brought in	
		Annually or period of proposed capital to be One Year Value /Amount of investment	brought in	o fulfill the Electricity
	(d) (e)	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period	brought in equirement of Department/T al Zone (or) Special Econom (286) Days	o fulfill the Electricity
	(d) (e) (f)	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period	brought in equirement of Department/T al Zone (or) Special Econom (286) Days	o fulfill the Electricity
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period	brought in equirement of Department/T al Zone (or) Special Econom (286) Days	To fulfill the Electricity nic Zone in the Region n regard to the abov
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period : Describe with annexure if it is required for Paragraph 8 (e).	brought in equirement of Department/T al Zone (or) Special Econom (286) Days	o fulfill the Electricity
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period : Describe with annexure if it is required for Paragraph 8 (e).	brought in equirement of Department/T äl Zone (or) Special Econom (286) Days	To fulfill the Electricity nic Zone in the Region n regard to the abov
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period : Describe with annexure if it is required for Paragraph 8 (e).	brought in equirement of Department/T al Zone (or) Special Econom (286) Days or the specific condition i Foreign Currency	To fulfill the Electricity nic Zone in the Region n regard to the abov Equivalent Kyat
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period : Describe with annexure if it is required for Paragraph 8 (e). iled list of foreign capital to be brought in - Foreign currency	brought in equirement of Department/T al Zone (or) Special Econom (286) Days or the specific condition i Foreign Currency	To fulfill the Electricity nic Zone in the Region n regard to the abov Equivalent Kyat
9.	(d) (e) (f) Note	Annually or period of proposed capital to be One Year Value /Amount of investment USD 92.68 Million Investment period (5)Years/Extension as per re requirement for the Industri Construction /Preparation period : Describe with annexure if it is required for Paragraph 8 (e).	brought in equirement of Department/T al Zone (or) Special Econom (286) Days or the specific condition i Foreign Currency	To fulfill the Electricity nic Zone in the Region n regard to the abov Equivalent Kyat

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(c)	The value of initial raw materials and		
	other similar materials		
	(to enclose detailed list)		
(d)	Value of license, intellectual property,		
	industrial design, trade mark,		
	patent, etc.	5	
(e)	Value of technical know-how	5.74	8,032.18
(f)	Others(eg: Construction materials)		
	Total	80.68	112,944

Remark: The evidence of permission shall be submitted for the above paragraph 9 and (e).

10. Details of local capital to be contributed -

Kyat (Million)

	(a)	Amount	6,196.99
	(b)	Value of machinery and equipment	
3.		(to enclose the detailed list)	
	(c)	Value or rental rate of land and buildings	
	(d)	Cost of building construction	10,547.87
	(e)	Value of furniture and assets	
		(to enclose the detailed list)	·
	(f)	Value of initial raw material	
		(to enclose the detailed list)	60
	(g)	Others	
		Total	16,804.86
		i v	
11.	Parti	culars of Loans-	
	ΓL	oan (local)	
			US\$
		oan (abroad)	US\$

2.	Part	ticulars about the Investment Business -						
	(a)	Investment location(s)/place (230KV) Bellin Substation Compound, Kyaukse District,						
		Mandalay Region.						
	(b)	b) Type and area requirement for land or land and building						
		(i) Location (230 KV) Bellin Substation Compound, Kyaukse District, Mandalay Region.						
		(ii) Area and number of land/building (10.12) Acre						
		(iii) Owner of the land <u>Ministry of Electricity and Energy</u>						
		(aa) Name/company/department						
		(bb) National Registration Card No.						
		(cc) Address						
		(iv) Type of land						
		(v) Period of land lease contract From To () year						
		(vi) Lease period						
		(vii) Lease rate						
		(aa) Land						
		(bb) Building						
		(viii) Ward						
		(ix) Township						
		(x) State/Region						
		(xi) Lessee						
		(aa) Name/ Name of Company/ Department*						
		(cc) Citizenship						
		(dd) ID No./Passport No.						
		(ee) Residence Address						
	NT-4	te: The following documents have to be enclosed for above Paragraph 12 (b)						
	Not	(i) to enclose land ownership and ownership evidences(except industrial zone) ar						
		land map;						
		(ii) land lease agreement(draft);						
	(c)	- Cluit dias to be constructed:						
	(~)	(i) Type / number of building						
		(ii) Area						
	(d)	Annual products to be produced/ Services Electricity						

- (e) Annual electricity requirement
 (f) Annual requirement of water supply
 Detailed information about financial standing (Attached)
 (a) Name/company's name
 (b) ID No./National Registration Card No./Passport No.
 - (c) Bank Account No.

Remark: To enclose bank statement from resident country or annual audit report of the principle company with regard to the above paragraph 13.

14. List of Employment:- Exhibit No. X

Item	Designation /Rank	Citizen	Foreign	Total
a	Senior management (Managers, senior officials)			1
b	Other management level (Except from senior management)	2		3
С	Professionals	1	2	3
d	Technicians	7	2	9
e	Advisors			
f	Skilled Labour	16		16
h	Workers	7		7
i esti di sua d i ti	Total	36	6	42

The following information shall be enclosed: -

(i) Social security and welfare arrangements for all employees;

Describe whether other Applications are being submitted together with the Proposal or not :

- (ii) Evaluation of environmental impact arrangements
- 15.

13.

- □ Land Rights Authorisation Application
- □ Tax Incentive Application

- 6 -

Signature of the applicant

- 7 -

Name: U Maung Kyay Title: Managing Director Department /Company PowerGen Kyaukse Co.,Ltd (Seal/Stamp)

1

Summary of Proposed Investment (Rule 38)

- 8 -

- 1. Please describe any other person who has a significant direct or indirect interest in the investment.
 - (a) Please describe an Enterprise or individual who are entitled to possess more than 10% of the profit distribution:
 - (1) Name
 - (2) Address
 - (3) Company Registration No. or N.R.C No./ Passport No.
 - (b) If there is directly participated Subsidiary in carrying out the proposed investment, please describe the name of that companies:

- (1) Myanmar Chemical & Machinery Company Limited
- (2) SEPCO III Electric Power Construction
- (3)
- The principal location or locations of the (230 KV) Bellin Substation Compound, Kyaukse investment:
- 3. A description of the sector in which the <u>Develop</u> investment is to be made and the activities and <u>Power P</u> operations to be conducted:
- 4. The proposed amount of the investment (in Kyat and US\$)

Develop, Own and operate a (145.49) MW Gas Power Plant for generating of electricity including provision of operation and maintenance service

129,749.37 Million Kyat equivalent to 92.68 Million USI

- 5. A description of the plan for the implementation of the Investment including expected timetable:
 - (a) Construction or Preparatory Period (Decribe MM/YY)
 - 286 Days from Commencement Date

(b) Commercial Operation Date (Decribe MM/YY)

17th February,2019

6. Number of employees to be appointed:

			36
	(a)	Local	6
	(b)	Foreign (Expert/ Technician)	
7.	Please	e specify the detailed list of foreign c	apital (Capital in-Cash and Capital in-Kinds) in Kya
	and U	JS\$:	JSD 5.74 Million
	(a)	Capital in-cash to be brought in Capital in-kind to be brought in	USD 74.94 Million
	(b)	Capital in-kind to be brought in	

Note: The investor may request the Commission to refrain from publishing commercial-in-confidential information of its investment.

12

Undertaking

I/We hereby declare that the above statements are true and correct to the best of my/our knowledge and belief.

I /We fully understand that proposal may be denied or unnecessarily delayed if the applicant fails to provide required information to access by Commission for issuance of permit.

I/We hereby declare to strictly comply with terms and conditions set out by the Myanmar Investment Commission.

Signature of the applicant

Name: U Maung Kyay Title: Managing Director Department /Company PowerGen Kyaukse Co.,Ltd (Seal/Stamp)

2018,August, Date:-----

Exhabit No- I

LIST OF EXECUTIVE DIRECTORS OF "POWERGEN KYAUKSE COMPANY LIMITED"

Sr. No	Name	Designation	N.R.C No./PP No.	Address
1.	U Maung Kyay	Managing Director	12/ LaThaNa (Naing) 018174	No.(C-4), Mon MyatMyittar Residence, Pin Shwe Nyaung Street, Tamwe Township, Yangon.
2.	U Than Myint	Director	12/LaMaTa (Naing) 027772	No.45/A, 6 1/2 miles, Pyay Road, Hlaing Township, Yangon.
3.	U Aung Hlaing Oo	Director	12/LaMaTa (Naing) 025897	No. 1120-1121, Thu Mingalar Street, 16/4, Ward, Thingangyun Township, Yangon
4.	Daw Noe Noe Su Aung	Director	12/ThaGaKa (Naing) 185395	No. 1120-1121, Thu Mingalar Street, 16/4, Ward, Thingangyun Township, Yangon.
5.	Mr. Zhang Yushi	Director	Passport No. G 49052786	No. 882-1 Tong'an Road, Laoshan District, Qingdao, China.

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ucc 1160/21 Leeren age Begiliu 116 ား ဤကတ်ပြားကို အမြဲဆောင်ထားရမည်။ ၂။ ရောက်ဆုံး၊ ရက်စီးသည့်အာဒါ သက်ဆိုင်ရာ ရစခန်းမြို့နယ်လူဝစ်ကြေးကြစ်ရေး နှင့် အများဆားမှုတ်ခုံတစ်ရေးဦးစီးဌာနချင့်ရှာကို သဆင်ပို့ရမည်။ နား ဤလက်မှတ်ကို အသက်()နှစ်ပြည့်လွှင် လဲသွယ်ရင်ညိုးရက်တွတ်ပါတ အရေးသူခြင်းခံရပည်။

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နိုင်ငံသားစိစစ်ရေးကတ်ပြား papplous scauch lo men តន៍ខ្ញុំ aiupas ဖခင်တမည် 10 22.6. 2000 မူးသက္ဆရာစီ င္းရံုသာဘာ ဝဘဓာဘ္ +@r9၁ 19.5 9' 6" အရပ် 100 4021090 220 ထင်စားသည့်စာစတ်ကလား နားမူး. ဦ. မြဲ. မိ စာမည် sbabi Onice a sufficie



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နိုင်ငံသားစိစစ်ရေးကတ်ပြား ကမ္မတိသ၂/သယက(နိုင်) ၁ စ ၅ ၃ ၉ ၅ ၂ ၆ · ၇ · ၂ ၀ · ၈ ရက်ခွဲ ၂ ၆ · ၇ · ၂ ၀ · ၈ g: emerge g: ဖခင်အမည် မွေးသက္တရာဇ် စားသို့ အောင်ကျော်စိုး လူမျိုး/ဘာလာ တာဂူဝင်္က မာမာဘာ မျိန်... တရပ် .၅'.၄."..... သွေးတူစ်စု 🗲 ထင်ရှားသည့်အမှတ်စာသား ဝဲနား ေကာက်မျှ ဂို ရာထူး လဝက - ၁၆၈၉၈ ည္အန်ကြားစရးမှုမှု



中華人民共和国科文部造品國軍政紀长時結果人子保護社 的便利和志美的保助。

The Ministry of Norwige Affairs of the People's Republic of China requests all easi and military authorities of proving countries to allow the bears of this parameter to prove freely and affaed constance to cost of used.

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AND THE REAL PROPERTY AND ADDRESS OF

PAUROET H

班/ZHANG
玉伊印/YUSHI
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山奈/SHANDONG
29 OCT 1965
山东/SHANDONG
03 MAR 2011 02 MAR 2021

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02 MAR 2021

Exit & Entry Administration Ministry of Public Security

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公安部出入境管理局

အခွန်ကင်းလွတ်ခွင့် သို့မဟုတ် သက်သာခွင့်လျှောက်ထားလွှာ

သို့ දුහිටු မြန်မာနိုင်ငံရင်းနိုးမြှုပ်နှံမှုကော်မရှင် စာအမှတ်၊PGK /KS-135/MIC-/2018 ရက်စွဲ ၊၂၀ ခုနှစ်၊သြဂုတ်လ ရက် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေအရ အခွန်ကင်းလွတ်ခွင့် သို့မဟုတ် သက်သာခွင့် အကြောင်းအရာ။ လျှောက်ထားခြင်း ကျွန်တော်/ကျွန်မသည် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ပုဒ်မ ၇၄ အရ အခွန်ကင်းလွတ် ခွင့် သို့မဟုတ် သက်သာခွင့်များ ခံစားခွင့်ရရှိရေးအတွက် အောက်ဖော်ပြပါအချက်များအား ဖြည့်စွက်၍ လျှောက်ထားအပ်ပါသည်-ရင်းနှီးမြှုပ်နှံသူ၏ ЭII ဦးမောင်ကျေး ပါပါဂျန် ကျောက်ဆည် ကုမ္ပဏီ (က) အမည် (ခ) ကုမ္ပဏီအမည် (ဂ) လုပ်ငန်းအမျိုးအစား လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ခြင်းလုပ်ငန်း (ဃ) ခွင့်ပြုမိန့်အမှတ် သို့မဟုတ် အတည်ပြု မိန့်အမှတ် (လျှောက်ထားဆဲဖြစ်ပါက အတည်ပြုမိန့်လျှောက်ထားဆဲဖြစ်ပါသည်,. လျှောက်ထားဆဲဖြစ်ကြောင်းဖော်ပြရန်) ရင်းနှီးမြှုပ်နှံသူကိုယ်တိုင်လျှောက်ထားခြင်း JI မဟုတ်ပါကလျှောက်ထားသူ၏ ဦးမောင်ကျေး (က) ဆက်သွယ်ရမည့် ပုဂ္ဂိုလ်အမည် နိုင်ငံသားစိစစ်ရေးကတ်/ ၁၂/လသန(နိုင်)၀၁၈၁၇၄ (ວ) နိုင်ငံကူးလက်မှတ် အမှတ် တည်ဆောက်မှုကာလ/ပြင်ဆင်မှုကာလ (၂၈၆) ရက် ٩I စီးပွားဖြစ်စတင်ဆောင်ရွက်သည့်နေ့ စတင်ထုတ်လုပ်သည့်နေ့မှစ၍ Ģι အောက်ပါအခွန်ကင်းလွတ်ခွင့် သို့မဟုတ် သက်သာခွင့်ကိုခံစားခွင့်ပြုနိုင်ပါရန် လျှောက်ထား ூட အပ်ပါသည်-မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေပုဒ်မ ၇၅ (က)ပါ ဝင်ငွေခွန်ကင်းလွတ်ခွင့် (က) ပြည်ပမှဝယ်ယူတင်သွင်းသည့် စက်ပစ္စည်းကိရိယာများ၊ လုပ်ငန်းသုံးပစ္စည်းအတွက် (0) အကောက်ခွန်နှင့် ပြည်တွင်းအခွန်အကောက်များကင်းလွှတ်ခွင့် (၂) ဂင်ငွေခွန်သက်သာခွင့်

လျှော့တွက်နှုန်းထားတွက်ချက်မှုကိုပူးတွဲတင်ပြရန်။ ရင်းနှီးမြှုပ်နှံသူသည် ပစ္စည်းတန်ဖိုး လျော့တွက်နှုန်းထားကို တွက်ချက် ခံစားခွင့်အတွက် (ວ)

- နိုင်ငံတော်၏ သက်ဆိုင်ရာ ဥပဒေများအရ ခွင့်ပြုထားသည့် ပစ္စည်း တန်ဖိုး (က) လျှော့တွက်နှုန်းထားနှင့် ၄င်းနှုန်းထား၏၁.၅ဆနှင့် တူညီသည့် ပစ္စည်းတန်ဖိုး လျှော့တွက်နှုန်းထားတို့ကို ယှဉ်တွဲတွက်ချက် ဖော်ပြထားသည် ပစ္စည်းတန်ဖိုး
- ဖော်ပြပေးရန်။ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ပုဒ်မ ၇၈(ခ) အရ ကင်းလွတ်ခွင့်နှင့် သက်သာခွင့် လျှောက်ထားမည် NOC ဆိုပါကအောက်ပါအချက်အလက်များကိုဖော်ပြပေးအပ်ရန် -
- ရင်းနှီးမြှုပ်နံ့လိုကြောင်းဖော်ပြရန်။ ပြန်လည် ရင်းနှီးမြှုပ်နံမည့် ပမာဏကို (n)
- အမြတ်ငွေဖြစ်ကြောင်းဖော်ပြရန်။ မည်သည့်ဘဏ္ဍာနှစ်အတွက် ပြန်လည် (ວ)
- ဆိုပါက နည်းဥပဒေ ၉၉နှင့်အညီ တစ်ဖက်ပါအချက်အလက်များကို ဖော်ပြပေးအပ်ရန်-(က) မည်သည့်ဘဏ္ဍာနှစ်အတွက်ရရှိခဲ့သည်
- မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ပုဒ်မ၇၈(က)အရ ကင်းလွတ်ခွင့်နှင့် သက်သာခွင့် လျှောက်ထားမည် 61
- ပို့ကုန်များမှရရှိသော တစ်နှစ်စာ နိုင်ငံခြားငွေ (ə)
- ခွင့်လျှောက်ထားမည်ဆိုပါက ဇယား (၂) နှင့်အောက်ပါအချက်အလက်များကို ဖော်ပြပေးအပ်ရန်-ရင်းနီးမြှုပ်နံမှုလုပ်ငန်းမှ ရရှိမည့် တစ်နှစ် (က) စာမျှော်မှန်းဝင်ငွေ
- ၈၄ ပါအချက်အလက်များကို ဇယား(၁) တွင်ဖြည့်စွက်ရန် မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေပုဒ်မ ၇၇ (ခ) အရ အခွန်ကင်းလွတ်ခွင့်နှင့် သက်သာ **ທ**າ
- ငွေခွန်ကင်းလွတ်ခွင့် လျှောက်ထားမည် ဆိုပါက နည်းဥပဒေ၈၃နှင့် အညီ လုပ်ငန်းဆောင်ရွက် နေသည့်ဇုန်နေရာ သို့မဟုတ် နည်းဥပဒေ ၉၆ ------နှင့်အညီ တွက်ချက်ထားသော ရင်းနှီးမြှုပ်နှံမှု ဇှန် (၂) လုပ်ငန်းတန်ဖိုး ၆၅ရာခိုင်နှုန်း အထက်အား ____ ရင်းနှီးမြှုပ်နှံ ထားသည့်သို့မဟုတ် လုပ်ငန်း _____ ဆောင်ရွက်နေသည့် ဇုန်နေရာကို ဖော်ပြပေးရန်။ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေ ပုဒ်မ ၇၇ (က) နှင့် (ဃ) ကိုလျှောက်ထားမည် ဆိုပါက နည်းဥပဒေ

မှတ်ချက်။ မိမိလျှောက်ထားလိုသည့် ကင်းလွတ်ခွင့်နှင့် သက်သာခွင့်များကို ဖော်ပြရန်။

မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နံ့မူဥပဒေပုဒ်မ၇၅(က)ပါဝင်

Gıı

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အခြားသက်ဆိုင်ရာ အစိုးရဌာန၊ အစိုးရအဖွဲ့အစည်းထံ သီးခြားလျှောက်ထားခြင်း သို့မဟုတ် ရရှိထားခြင်းရှိ၊မရှိ။

၁၁။ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေပုဒ်မ၇၈(ဂ)အရ ကင်းလွတ်ခွင့်နှင့် သက်သာခွင့် လျှောက်ထားမည် ဆိုပါကဘဏ္ဍာနှစ်အတွက် သုတေသနနှင့်ဖွံ့ဖြိုးရေးလုပ်ငန်းများ၏ စာမှန်တကယ်ကုန်ကျစရိတ်ကို စာရင်းပြုစု၍ပူးတွဲတင်ပြရန်။

လျှာက်ထားသူလက်မှတ် MAUNE KYAY
အမည် <u>MANAGING DIRECTOR</u>
ရာထူး POWERGEN KYAUKSE CO., LTD.
ဌာန/ကုမ္ပဏီတံဆိပ်

ဇယား (၁) - ထုတ်လုပ်မှုအတွက်လိုအပ်သည့်ပစ္စည်းများစာရင်း

စဉ်	ပစ္စည်းအမျိုးအမည်	HS Code (ဂဏန်း၄လုံးဖြင့်ဖော်ပြရန်)	ရေတွက်ပုံ	အရေအတွက်	တစ်ခုချင်းတန်ဖိုး	စုစုပေါင်းတန်ဖို း	ပင်ရင်းနိုင်ငံ	
							ပြည်တွင်း	ပြည်ပ
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	စုစုပေါင်း							

မှတ်ချက်။ Brand New / Reconditionedခွဲခြားဖော်ပြပေးရန်။

ဇယား(၂) - ထုတ်လုပ်မှုအတွက် လိုအပ်သည့် သွင်းအားစုစာရင်း

စဉ်	ပစ္စည်းအမျိုးအမည်		ပစ္စည်းအမျိုးအမည် HS Code ဖ (ဂဏန်း၄လုံးဖြင့်ဖော်ပြရန်)	ရေတွက်ပုံ	တစ်ခုချင်း တန်ဖိုး		0	အခြား	
				(အမေရိကန်	ပြည်	တွင်း	පිස්		ဦပ
1				ဒေါ်လာ)	အရေအတွက်		အရေအတွက်	စုစုပေါင်း	
						(အမေရိကန် ဒေါ်လာ)		(000' အမေရိကန်	
								ဒေါ်လာ)	
	c	J	9	9	ງ	હ	?	n	e
1	Lubricating Oil		Lit				295,680,000	917.63	
					A				
	စုစုပေါင်း						295,680,000	917.63	

Form (6)

Tax Incentive Application

То

Chairman

Myanmar Investment Commission

Ref.No: NIHC/KS-135/MIC- /2018

Dated : 2018 August

Subject : Application for Tax Incentive

I do hereby apply with the following particulars for the tax incentive under section 74 of Myanmar Investment Law:

1.	Applicant
	(a) Name of Investor U Maung Kyay
	(b) Name of Company PowerGen Kyaukse Company Limited
	(c) Type of Business Power Purchase 145.49 MW Gas Engine Power
(d)	Myanmar Invesment Commission
	Permit or Endorsement No. (If a permit
	or endorsement is still processing, please Endorsement is still processing
	describe the information.)
2.	If investor doesn't submit by himself/
	herself, the applicant's;
	(a) Name of contact Person U Maung Kyay
	(b) National Registration Card No/ 12/LaThaNa(N)018174
	Passport No
3.	Construction period or Preparatory period (286)days from Commencement Date
4.	Commencement date for commercial operation 17 th Febuary 2019
5.	Applied for the following tax incentive:
	(a) Exemption or Relief under section 75(a)
	(1) Tax incentive for the machinery and equipment import from abroad Exhibit No.II
	A, B
	(2) Income tax exemption

Note: The application must specify precise tax incentives applied for.

6. If the investor apply for tax incentive under section 75 (a), Please state the Zone in accordance rule 83 or the Zone in which more than 65% of the value of the investment is invested or carried out in accordance with rule 96.

Zone (2)

- 7. If the investor apply for tax incentive under section 77 (a) and (d), please fill the information in schedule (1).
- 8. If the investor apply for tax incentive under section 77(b), Please state the following information and fill in schedule (2):
- 9. If the investor apply for tax incentive under section 78 (a), please state the following information in accordance with rule 99:
 - Please describe, which financial year the profits reinvested are earning by the investor.
 - (b) Please describe which financial year
 the profits are reinvested by the investor.
- 10. If the investor apply for tax incentive under section 78 (b), please describe the following information:
 - (a) Provide the depreciation schedule of assets for which the depreciation rate is to be adjusted, showing both the depreciation at the standard rate and at a rate of 1.5 times the depreciation rate permitted under the relevant laws of the Union.
 - (b) Has the investor separately applied for or obtained an adjustment to the depreciation rate from the relevant authority.
- 11. If the investor apply for tax incentive under section 78 (c), provide an itemized list of actual research and development expenses for the current financial year.

Signature	MAUNG KYAY
	estor MANAGING DIRECTOR
Designation	POWERGEN KYAUKSE CO., LTD
Department/	Company
(Seal/Stamp))

SCHEDULE (1)- LIST OF PRODUCTION EQUIPMENTS NEEDED

NO	LIST OF ITEM	IST OF ITEM HS CODE UNIT QUANTITY (WITH FOUR		UNIT PRICE (USD)	TOTAL VALUE	SOURCE		
		DIGIST)					LOCAL	IMPORT
	1	2	3	4	5	6	7	8
m								
	TOTAL							

Note : Please specify the brand new item or reconditioned item.

SCHEDULE (2) – LIST OF PRDUCTION INPUT NEEDED

NO.	LIST OF ITEM			UNIT		OTHER			
	FOU	(WITH		PRICE(USD)	LOC	AL	IMP	ORT	
		DIGIST)			QUANTIT Y	TOTAL VALUE (USD)	QUANTIT Y	TOTAL VALUE (000'USD)	
	1	2	3	4	5	6	7	8	9
1	Lubricating oil		Lit				295,680,000	917.63	
	TOTAL						295,680,000	917.63	

Exhibit No. - II

145.49 MW Gas Engine Power Plant Project Investment Cost

					Million USD	
			Amount		Total	
No.	Particular	Ks	Equivalent (USD)	USD	amount, USD	Remarks
1	2	3	4	5	6	7
1	Power Plant (Main equipment and installation)					
1.1	Gas Engine and generation			57.11	57.11	Need to be imported
1.2	Electrical system supply including equipment and material			5.23	5.23	Need to be imported
1.3	Instrumentation & Control systems supply including equipment and material			1.03	1.03	Need to be imported
1.4	Balance of Power Plant			6.53	6.53	Need to be imported
1.5	Steel structures supply for all buildings and structure			3.16	3.16	Need to be imported
2	Civil Construction work	7672.76	5.48		5.48	
3	Erection & installation service			2.56	2.56	
4	Domestic material supply	2417.37	1.73		1.73	
5	Soil investigation			1.17	1.17	
6	Gas Infra (NPT)	457.74	0.33	1.88	2.21	Need to be imported (1.88 M\$ out of 2.21 M\$)
7	EIA	60.00	0.04		0.04	
8	Consultancy Fee			2.00	2.00	
9	Interest during construction	3631.60	2.59		2.59	
10	Working capital	2565.39	1.83		1.83	
	Total	16,804.86	12.00	80.675	92.678	

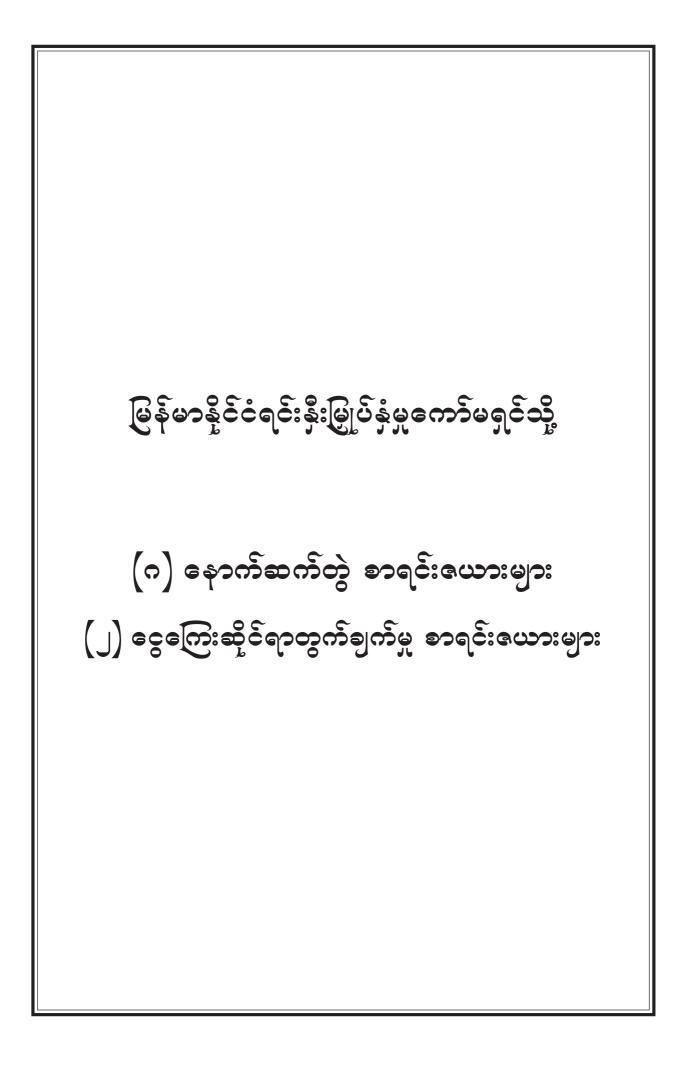
Note: Exchange rate : 1\$ = 1,400 Ks

IST OF	Material, Machineary & equipment to be imported					Exhibit No.II A	
/N	Item Description	Unit	QTY.	Unit Price	Price	HS Code (Customs Declaration)	Remar
	Gas Engine & Auxiliary Equipment					8411820000	
.1	Gas Engine	SET	8	4,193,871.01	33,550,968.11		
.1.1	Interior of gas engine	SET	8	134,032.25	1,072,257.98		
.1.2	Auxiliary module of gas engine	SET	8	91,354.84	730,838.70		
.1.3	Smoke exhausting module of gas engine	SET	8	79,427.42	635,419.35		
	Auxiliary module platform of gas engine	SET	8	62,500.00	500,000.00		
.1.5	Internal overhaul platform of main building	SET	8	100,000.00	800,000.00		
.1.6	Steel structure of main building	SET	8	128,074.79	1,024,598.35		
.1.7	Gas Engine Foundation bolts	SET	1	50,000.00	50,000.00		
.2	Auxiliary equipment of internal combustion engine generator unit	SET	8	81,250.00	650,000.00		
.2.1	Lube oil system	SET	1	522,338.74	522,338.74		
	Cooling system	SET	1	790,410.00	790,410.00		
	Main building Lifting facilities	SET SET	1	124,655.70 85,000.00	124,655.70 85,000.00		
.3	Gas Turbine Turning Device	SET	1	750,000.00	750,000.00		
.4 .5	Oil-water separation system Flue of gas engine	SET	1	212,568.45	212,568.45		
.5 .6	Insulation of gas engine	SET	1	30,000.00	30,000.00		
.7	Battery of gas engine	SET	1	50,000.00	50,000.00		
.8	Platform & Handrail	SET	1	30,000.00	30,000.00		
.9	Valve	SET	1	400,000.00	400,000.00		
	Main Fuel Oil Pump	SET	1	200,000.00	200.000.00		1
	Purge Air Compressor	SET	1	150,000.00	150,000.00		1
	Water Injection Pump	SET	1	150,000.00	150,000.00		1
	Spare parts	SET	1	1,314,128.93	1,314,128.93		1
	First Partial			-	-		1
-	Second Partial			-	-		
	Third Partial			-	-		
	Fourth Partial			-	-		1
13.5	Fifth Partial			-	-		
	Water Treatment System						
1	Make-Up Water Treatment System Equipment	SET	1	27,000.00	27,000.00	8421219990	
2	Demineralized water system	SET	1	19,499.07	19,499.07		
2.1	Demineralized water tank	SET	1	9,086.95	9,086.95		
	Demineralized water pump	SET	1	7,572.46	7,572.46		
2.3	CO2 absorber Chemical Dosing System Equipment	SET SET	1	2,839.67 47,327.85	2,839.67 47,327.85	8404101090	
.3	Potable sewage water treatment system equipment	SET	1	41,152.10	41,152.10	8421219990	
.5	Industrial wastewater treatment system equipments	SET	1	3,786.23	3,786.23	8421219990	
.6	Oil waste water treatment equipment	SET	1	97,684.68	97,684.68	8421219990	
7	Spare parts	SET	1	30,310.00	30,310.00		
	First Partial			-	-		
_	Second Partial			-	-		
.9	Miscellaneous of pumps for water treatment System	SET	1	50,000.00	50,000.00	8413709990	_
	Miscellaneous of Water Treatment System	SET	1	50,000.00	50,000.00	8421999090	
.1	Electrical System Gas Engine Generator	SET	0	702 552 70	- E 600 400 04	8503002000	
2	Gas Engine Generator Gas Engine Generator Auxiliaries	SET	8 8	703,552.79 52,500.00	5,628,422.31 420,000.00	8503002000	
3	Generator circuit breaker and accessories	SET	9	10,937.99	98,441.92	853620000	
4	Vacuum circuit breaker	SET	9	48,169.23	433,523.09	000020000	
	Phase busduct	M	300	7,085.61	2,125,684.46	8544601200	
	Main transformer	SET	3	1,417,122.97	4,251,368.92	8504231200	
	Main transformer accessories	SET	1	965,251.66	965,251.66		
7	132Kv GIS Equipment	SET	1	810,631.39	810,631.39	8504231100 8535302000	
		0L1		010,001.00	010,001.00	8535292000 8535400000	
8	Protective panel	SET	1	335,081.17	335,081.17	8537209000	事故保守
9	Fast Transfer Devices	SET	1	124,751.67	124,751.67	8537209000	争 故 保 3 源 装 1
	Program control devices of CHP	SET	1	57,929.29	57,929.29	8537101190	
	Direct current equipments and Battery	SET	1	59,349.12	59,349.12	8504401990	-
12 13	High-Voltage Switchgear Cabinet Low-voltage distribution panel and accessories	SET SET	1	82,182.94 84,076.05	82,182.94 84,076.05	8535900090 8537109090	
14	Engineer station	SET	1	57,128.46	57,128.46	8537 109090	
	High voltage distribution device	SET	1	380,000.00	380,000.00		
16	Low-voltage transformers, dry-type transformer	SET	1	899,229.12	899,229.12	8504339000	1
17	Diesel oil generator and accessories	SET	1	500,000.00	500,000.00	8502132000	
18	Uninterrupted Power Supply equipments	SET	1	550,430.72	550,430.72	8504402000	
	Lighting Facility	SET	1	56,570.98	56,570.98	9405500000	_
	Ground and Lighting Protection	SET	1	50,000.00	50,000.00	8537109090	
21	Lightning Arrester	SET	1	68,152.10	68,152.10	8535400000	-
22 23	Communication system equipments	SET	1	208,242.53 50,000.00	208,242.53	8517699000 8538900000	
23	Miscellaneous of electric system	SET	1	50,000.00	50,000.00	0030900000	+
1	I&C system Distribution control system	SET	1	242,318.58	- 242,318.58	8471499100	
2	Instrumentation & actuator	SET	1	94,655.70	94,655.70	9026100000	
-	I&C for Gas Engine	SET	1	790,410.68	790,410.68	9026100000	1
3					105,067.82	9026100000	1
	I&C measurement element equipments	SET	1	105.067.82			
3 4 5	I&C measurement element equipments Protective and control panel	SET SET	1	105,067.82 39,755.39	39,755.39	8537109090	
4							

6/N	Item Description	Unit	QTY.	Unit Price	Price	HS Code (Customs Declaration)	Remar
	HVAC				-	Deenaraiienij	
.1	Fans for AC	SET	1	81,000.00	81,000.00	8414519900	
3	Constant temperature and humidity air conditioners	SET	1	21,000.00	21,000.00	8415822001	
5	Split cabinet / Wall mountedair conditioners	SET	1	10,000.00	10,000.00	8415822001	
8	Air conditioning and accessories	SET	1	10,000.00	10,000.00	8415822001	
	Compress Air System				-		
1	Air compressors and accessories	SET	1	675,410.68	675,410.68	8414400000	
2	Air storage tank	SET	1	66,000.00	66,000.00	7311001000	
	Laboratory Equipment				-		
1	Chemistry instrument and Chemica	SET	1	76,793.42	76,793.42	9027809900	
2	Electrical laboratory equipment	SET	1	60,000.00	60,000.00	9030390000	
3	Instrument laboratory equipment	SET	1	60,000.00	60,000.00	9027809900	
4	Environmental laboratory equipment	SET	1	30,000.00	30,000.00		
5	Atmospheric quality continuous detection system	SET	1	30,000.00	30,000.00		
	Material				-		
1	Valves	SET	1	980,000.00	980,000.00	8481804090	
1.1	First Partial			-	-		
1.2	Second Partial			-	-		
2	Medium and low pressure pipe	SET	1	380,000.00	380,000.00	7304391000	
2.1	First Partial			-	-		
2.2	Second Partial			-	-		
3	Electrical maintenance box	SET	1	160,000.00	160,000.00	8537109090	
3.1	Profile Steel	SET	1	50,000.00	50,000.00	7216	
3.2	First Partial			-	-		
3.3	Second Partial			-	-		
1	Lighting box	SET	1	200,000.00	200,000.00	94055000	
5	PVC&GRP pipe	SET	1	300,000.00	300,000.00	39172100000	
6	Stainless Steel Pipe	SET	1	24,000.00	24,000.00		
7	Wire pipe	SET	1	1,697.65	1,697.65	7304399000	
8	Whole plant cable(power& control)	SET	1	900,000.00	900,000.00	8544492100	
8.1	First Partial			-	-		
8.2	Second Partial			-	-		
8.3	Third Partial			-	-		
9	Cable tray	SET	1	500,000.00	500,000.00	7308900000	
9.1	First Partial			-	-		
9.2	Second Partial			-	-		
9.3	Third Partial			-	-		
10	Steel flate (grounding system)	SET	1	8,000.00	8,000.00	7214990000	
11	Grounding devices	SET	1	10,000.00	10,000.00	7214990000	
12	Trolley conductor	SET	1	8,000.00	8,000.00	8544492900	
13	Fireproofing material	SET	1	100,000.00	100,000.00	6806900000	
14	Thermal insulation material and painting	SET	1	50,000.00	50,000.00	6806900000	
14	mermai insulation material and painting	361	1	30,000.00	30,000.00	3208909000	
15	Instrumentation of I&C	SET	1	127,000.00	127,000.00	9026100000	
16	Steel structure	SET	1	824,598.35	824,598.35	7211140000	
16.1	First Partial			-	-		
16.2	Second Partial			-	-		
16.3	Third Partial			-	-		
	Fourth Partial			-	-		
16.5	Fifth Partial			-	-		
17	Platform、 railing	SET	1	80,000.00	80,000.00		
7.1	First Partial			-	-		
7.2	Second Partial			-	-		
						7216	
10	Consumable material	SET	1	50,000.00	50,000.00	7304	
18	Consumable material	SEI	' '	50,000.00	50,000.00	7308	
						8537	
						7216	
40	Minnellen name of motorials	OFT		50,000,00	50,000,00	7304	
19	Miscellaneous of materials	SET	1	50,000.00	50,000.00	7308	
						8537	
20	Container house	SET	1	90,869.47	90,869.47		
	Other System				-		
1	Maintenance Equipmen	SET	1	94,655.70	94,655.70	8426112000	
2	Fire Fighting Equipment and Accessories	SET	1	988,458.24	988,458.24	8543709990	
3	Electric Cranes and Hoisters for Power Plant	SET	1	500,000.00	500,000.00	8426112000	
4	Steel Structure of Whole Power Plant	SET	1	400,000.00	400,000.00	7308900000	
5	High strength bolts of whole power plant steel structure	SET	1	50,000.00	50,000.00	7318151001	1
6	Living water and industrial water equipment	SET	1	226,795.05	226,795.05		
-				, 00.00	, 00.00		
)	Provisional Amount	1		500,000.00	500,000.00		1
				,-00.00	73,058,963.00		
					, ,		
	y of Original: CHINA、NETHERLANDS、 CZECH REPUBLIC、	FRANCE	USA.	GERMANY, ROM	ANIA, INDIA, ITA	Y, POLAND, FI	NLAN

Gas Pipe Line, Main & Internal Gas skids and Related Accessories (Gas Infrastructure Works)

Item	to be imported for Gas Infrastructure			Exhibit No.II (B)
Sr	Description	Unit	Qty	Amount - USD
	Imported Items			
1	10" ERW API 5L Grade x-42 MS 3 Layer PE Coated Line Pipe	MTR	7810	507,650
2	Freight charges, Tiajain to Ygn			30,000
3	Heat Shrinkable Sleeve	Rolls	25	8,275
4	10" φ Steel Ball Valve (ANSI 600 Class)	Set	3	18,360
5	Pipe Fitting (45°, 90°)	Lot	1	13,556
6	Gas Filteration Skid, Pressure Control & Metering Skid	Lot	1	807,000
7	Accessories of above gas skid	Lot	1	124,900
8	Internal gas skids, 8 sets of Pressure Reduction for Wartsila	Lot	1	368,680
	Total - Imported Items (USD)			1,878,421



		PROPOSAL F Investment / 145.49 MW Gas Po	Capital cost	ject	Exhibit No -III (Million USD
Sr. No		Particulars	Equity	Loan	Total
1		2	3	4	5
1		INVESTMENT TYPE			
	1	Gas Engine		57.11	57.
	2	Machinical and Electrical system	8.21	7.74	15.9
	3	Civil Work	10.95		10.9
	4	Gas Infrastruture	2.21		2.2
	5	EIA	0.04		0.0
	6	Others	6.42		6.4
		Total Capital	27.83	64.85	92.

PROPOSAL FORM (2) KYAUKSE POWER PLANT PROJECT MILLION USD Exhibit No-IV

Sr.no	Particular	Year 1	Year 2	Year 3	Year 4	Year 5	Total	
1	2	3	4	5	6	7	8	
1	Annual Net Engergy Output (MWh)	1,019,596.72	1,019,596.72	1,019,596.72	1,019,596.72	1,019,596.72	5,097,983.62	
	Revenue from electricity production	32.42	32.42	32.42	32.42	32.42	162.09	
	Less Exchange Difference	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)	(2.43)	
2	Total Revenue	31.93	31.93	31.93	31.93	31.93	159.66	
	-							
1	Net Guarantee Output (MW)	145.49						
2	Annual Operation Hours	8760						
3	Avg Plant Load Factor	80%						
4	PPA Tariff (USD/MWh)	31.79						

Note: EPGE shall make energy payment in the Myanmar Kyats equivalent to the tariff payable that is denominated in US Dollars base on Exchange rate published by Central Bank of Myanmar

PROPOSAL FORM (2)

KYAUKSE POWER PLANT PROJECT

BUTGETED PROFIT AND LOSS

Exhibit No. V

MILLION USD

Sr.	No.	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1		2	3	4	5	6	7	8
1		Reveneue	32.42	32.42	32.42	32.42	32.42	162.09
		Less exchange difference	(0.49)	(0.49)	(0.49)	(0.49)	(0.49)	
		Gross Profit	31.93	31.93	31.93	31.93	31.93	159.66
2		Expenses						
	1	Fixed O&M Cost	2.07	2.07	2.07	2.07	2.07	10.33
	2	O&M Mobilisation cost	3.76	-	-	-	-	3.76
	3	Variable O&M Cost	3.55	3.55	3.55	3.55	3.55	17.76
	4	Major overhaul	-	-	-	5.55	-	5.55
	5	Insurance	0.68	0.70	0.73	0.76	0.79	3.66
	6	Withhold Tax	0.23	0.14	0.14	0.28	0.14	0.93
	7	Penalties		0.53		0.53	0.16	1.29
		Total Expenses	10.28	6.99	6.56	12.73	6.71	43.28
3		EBITDA	21.65	24.94	25.37	19.20	25.22	116.38
		Depreciation & Amortization	18.54	18.54	18.54	18.54	18.54	92.68
4		EBIT	3.11	6.41	6.83	0.67	6.69	23.71
		Interest	5.19	4.15	3.11	2.08	1.04	15.56
5		Profit before tax	(2.08)	2.26	3.72	(1.41)	5.65	8.14
		Taxes	-	-	-	-	-	-
6		Profit after tax	(2.08)	2.26	3.72	(1.41)	5.65	8.14
		CSR	-	0.02	0.04	-	0.06	0.12
7		FINAL Net Earning	(2.08)	2.23	3.68	(1.41)	5.59	8.02

PROPOSAL FORM (2) KYAUKSE POWER PLANT PROJECT CASHFLOW STATEMENT Exhibit No. VI

MILLIC	ON USD						
Sr.no	Particular	Year (1)	Year 1	Year 2	Year 3	Year 4	Year 5
1	2	3	4	5	6	7	8
1	Operating Cash Flow						
	Net Earnings		(2.08)	2.23	3.68	(1.41)	5.59
	Plus: Depreciation & Amortization		18.54	18.54	18.54	18.54	18.54
	Less: Changes in Working Capital		-	-	-	-	-
	Cash from Operations		16.46	20.77	22.22	17.13	24.13
2	Investing Cash Flow						
	Investments in Property & Equipment	92.68	-	-	-	-	-
	Cash from Investing		-	-	-	-	-
3	Financing Cash Flow						
	Equity	27.83					
	Debt	64.85					
	Issuance (repayment) of debt		(12.97)	(12.97)	(12.97)	(12.97)	(12.97)
	Issuance (repayment) of equity		-	-	-	-	-
	Cash from Financing	92.68	(12.97)	(12.97)	(12.97)	(12.97)	(12.97)
4	Net Increase (decrease) in Cash		3.49	7.80	9.25	4.16	11.16
	Opening Cash Balance		-	3.49	11.29	20.54	24.69
5	Closing Cash Balance		3.49	11.29	20.54	24.69	35.85

PROPOSAL FORM (2) KYAUKSE POWER PLANT PROJECT RECOUPMENT PERIOD Exhibit No-VII MILLION USD

Sr.no	Particular	Year (1)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	2	3	4	5	6	7	8	9
1	Cash Inflow							
	Profit (loss) after tax		-2.08	2.23	3.68	-1.41	5.59	8.02
	Add Depreciation		18.54	18.54	18.54	18.54	18.54	92.68
	Total Cash Inflow	-	16.46028	20.76829	22.21812	17.12567	24.12935	100.7017
2	Cash Outflow							
	Repayment of loan	0	12.97	12.97	12.97	12.97	12.97	64.84998
	Total Cash Outflow	-	12.97	12.97	12.97	12.97	12.97	64.85
3	Cash from Equity	27.83						
4	Net Cash Flow	(27.83)	3.49	7.80	9.25	4.16	11.16	35.85
	Opening Balance		(27.83)	(24.34)	(16.54)	(7.29)	(3.13)	
	Closing Balance	(27.83)	(24.34)	(16.54)	(7.29)	(3.13)	8.02	
Equity	Payback period							
4.28	Years							
(Appro	ximately 4 Years & 4 Month)							

			KYAUKSE POW INTERNAL R		ROJECT		(Million USI	D)
		NET		CASH	D	CF	D	CF
YEAR	INVESTM ENT	INCOME	DEPRECIATION	FLOW	8%	DCF	9%	DCF
1	2	3	4	5	6	7	8	9
0	-							
-1	92.68			(92.68)	1.000	(92.68)	1.0000	(92.68)
1		3.11	18.54	21.65	0.926	20.04	0.9174	19.86
2		6.38	18.54	24.92	0.857	21.36	0.8417	20.97
3		6.80	18.54	25.33	0.794	20.11	0.7722	19.56
4		0.67	18.54	19.20	0.735	14.11	0.7084	13.60
5		6.63	18.54	25.17	0.681	17.13	0.6499	16.36
Total		23.59		23.59		0.08		(2.32)
Project IR	R	8.03%						

		KYAUKSI INTERI	ROPOSAL I E POWER F NAL RATE Exhibit No.	OF RETU	RN	(Million USE	ור
		NET	CASH	DC	T. T	DC	,
YEAR	EQUITY	INCOME	FLOW	8% DCF		9%	DCF
1	2	3	5	6	7	8	9
0	_						
-1	27.83		(27.83)	1.000	(28)	1.0000	(28
1		3.49	3.49	0.926	3	0.9174	;
2		7.80	7.80	0.857	7	0.8417	
3		9.25	9.25	0.794	7	0.7722	
4		4.16	4.16	0.735	3	0.7084	:
5		11.16	11.16	0.681	8	0.6499	
Total		35.85	8.02		0.08		(0.7)

PROPOSAL FORM (2) KYAUKSE POWER PLANT PROJECT REPAYMENT OF LOCAL LOAN Exhibit No. IX

Foreign Commercial Bank

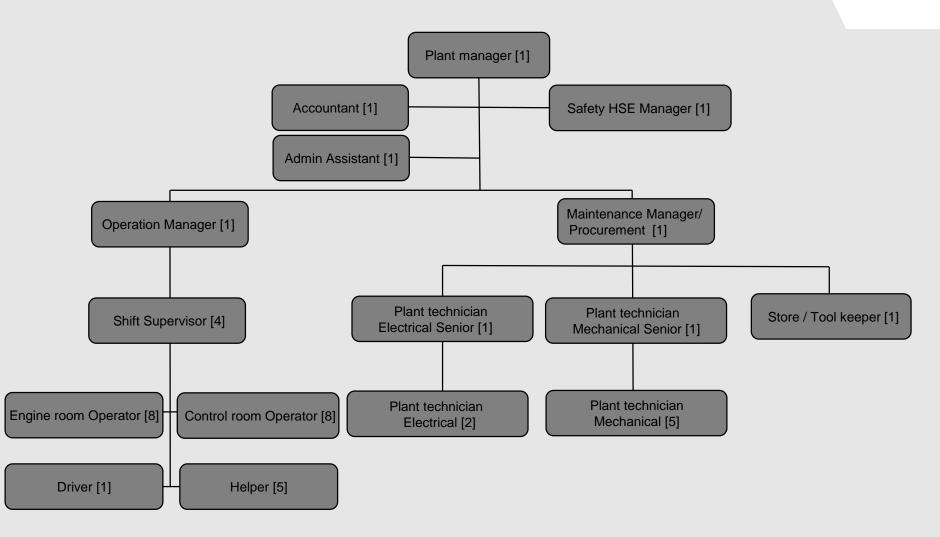
All in Loan Interest Rate	8%
Loan Duration, Years	5

MILLION USD

Sr. No.	Description	Year (1)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	2	3	6	7	8	9	10	16
1	Opening Balance of loan	64.85	64.85	51.88	38.91	25.94	12.97	
2	Interest Payment	2.59	5.19	4.15	3.11	2.08	1.04	18.16
3	Principal Repayment	-	12.97	12.97	12.97	12.97	12.97	64.85
4	Closing Blance of loan	64.85	51.88	38.91	25.94	12.97	-	



Preliminary Organisation Chart



Total 42 employees

		145.49 I	FOPERATION ST MW GAS POWEF t No. X					
			Local	F	oreigner			
Sr.	Particular	Qty	Salary USD /Month	Qty	Salary USD /Month	Total Qty	Total Monthly Salary, USD	Total Annual Salary, USD
1	Plant Manager			1	10,000	1	10,000	120,000
2	Admin assistant	1	3,000			1	3,000	36,000
3	HSE Manager			1	5,000	1	5,000	60,000
4	Accountant	1	1,500			1	1,500	18,000
5	Operation Manager			1	5,000	1	5,000	60,000
6	Shit Supervisor	4	2,000			4	8,000	96,000
7	Operator	16	1,300			16	20,800	249,600
8	Driver	1	1,000			1	1,000	12,000
9	Maintenance Manager			1	5,000	1	5,000	60,000
10	Mechanical/Electrical Engineer	7	1,300	2	2,000	9	13,100	157,200
11	Store/Tool Keeper	1	1,200			1	1,200	14,400
12	Helper	5	1,000			5	5,000	60,000
	Total	36		6		42		943,200



POWERGEN KYAUKSE COMPANY LIMITED

NO.(36), THEIN PHYU ROAD, PAZUNDAUNG TOWNSHIP, YANGON, MYANMAR. TEL: (95-1) 8610654, 8610656~59. FAX: (95-1) 200273, 295067

" To Whom It May Concern "

We, PowerGen Kyaukse Co., Ltd., has been starting to implement "145 MW Gas Engine Power Plant (145 MW GEPP)" in Belin village, Sintgaing Township, Kyaukse District, Myanmar in order to fulfill national power demand and supply of electricity in industrial development after receiving Letter of Award (LOA) from the Ministry of Electricity and Energy on 7.5.2018.

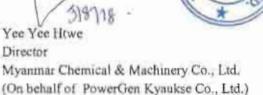
It is, therefore, we have appointed the following company to carry out Environmental and Social Impact Assessment (EIA) for our development project, 145 MW GEPP (Kyaukse).

Myanmar Sustainable Development Engineering Services Company Ltd.

VAI

No.651, Airport Avenue Lane 1, Saw Bwar Gyi Kone, Insein Tsp., Yangon, Myanmar. Sales: +95(9)69-5410678, +95(9)7-3175448, Admin: +95(9)78-1277395, +95(9)69-5160905 Project Team: +95(9)96-5160905 Email : nanda@m-sdes.com/contact@m-sdes.com

Best Regards



Myanmar Sustainable Development Engineering Services Co., Ltd.



No.551, Airport Avenue (1), Saw Bwar Gyi Kone, Insein Township, Yangon, Myanmar Admin: +95(9) 78-1277395, +95(9) 69-5160905, Project Tears: +95(9) 96-5160905 Sale: +95(9) 69-5410678, +95(9) 7-3175448 Fax: +95(0)1-655-849 Email: contact@im-sdes.com, Website: www.m-sdes.com

စာအမှတ်။ MSDES_၂၆/၀၇၀စၥစ_Mdy RGO ရက်စွဲ။ ၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ၊ (၈) ရက်

ဂန်ကြီးမှုပ် တိုင်းဆသကြီးအစိုးရအဖွဲ့ မန္တလေးမြို့။

အကြောင်းအရာ။ ၊ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်လေ့လာခြင်းနှင့်ပတ်သက်၍ ဒေသခံရပ်မိရပ်ဖနှင့် စိတ်ပါဝင်စားသူများ၏ သဘောထားဆန္ဒ အကြံပြုချက်များရယူနိုင်ပါရန်အတွက် "ပထမအကြိမ် အဓိကသက်ဆိုင်သူများ အစည်းအစေး" ကိုပြုလုပ်စွင့်ပေးပါရန် တင်ပြလျောက်ထားခြင်းနှင့်၊ အစည်းအဝေးသို့ သက်ဆိုင်ရာ ဘေသန္တရအုပ်ချုပ်ရေး အဖွဲ့အစည်းများမှ တတ်ရောက်ပေးနိုင်ရန်အတွက် ဖိတ်ကြားခြင်း။

၁။ အထက်ဝါအကြောင်းအရာကိစ္စနှင့်ပတ်သက်၍ ကျွန်တော်တို့ မြန်မာစဉ်ဆက်မပြတ်ဖွံ့ဖြိုးမှု အင်ဂျင်နီယာ ဝန်ဆောင်မှု ကုမ္ပဏီသည် ဘဲလင်းဓာတ်အားခွဲရဲ့ဝင်းအတွင်း PowerGen Kyaukse Co.,Ltd မှ အကောင်အထည်ဖော်ဆောင်ရွက်မည့် ၁၄၅ မဂါဝပ် သဘာဝဓါတ်ငွေအင်ဂျင်သုံးလျှပ်စစ်ဓာတ်အားပေးစက်ရုံစီမံကိန်းနှင့် ပတ်သက်၍ ပတ်ဝန်းကျင်ထိခိုက်ဆန်းစစ် လေ့လာမှုများကို ပူးတွဲပါ (၁) တွင် ဖော်ပြထားသည့်အတိုင်း တာဝန်ယူဆောင်ရွက်လျက်ရှိပါသည်။

၂။အဆိုဝါ သဘာဝဓာတ်ငွေ့အင်ဂျင်သုံးလျှပ်စစ်ဓာတ်အားပေးကော်ရုံစီမံကိန်းနှင့်ပါတ်သက်၍ ဒေသခံရပ်မိရပ်စများ၊ အဓိကသက်ဆိုင် သူများ၊ ကိုယ်စားလှယ်များအား ပွင့်လင်းမြင်သာမှုရှိစေရန်အတွက် စီမံကိန်းသတင်းအချက်အလက်များအား ရှင်းလင်းတင်ပြခြင်း၊ ပတ်ဝန်းကျင်ထိနိုက်မှုများအား ရှင်းလင်းတင်ပြမည်ဖြစ်ပါသည်။ ထို့အပြင် စီမံကိန်းနှင့်ပါတ်သက်၍ ဒေသခံရဝ်မိရပ်စများ၊ ဖတ်ဝန်းကျင်ထိနိုက်မှုများအား ရှင်းလင်းတင်ပြမည်ဖြစ်ပါသည်။ ထို့အပြင် စီမံကိန်းနှင့်ပါတ်သက်၍ ဒေသခံရဝ်မိရပ်စများ၊ အဓိကသက်ဆိုင်သူများ၊ ကိုယ်စားလှယ်များနှင့်ဆွေးနွေး၊ မေးမြန်း၊ အကြံပြုချက်၊ သဘောထားများရယူလိုပါသဖြင့် ''ပထမအကြိမ်အဓိက သက်ဆိုင်သူများအစည်းအဝေး'' ကို အောက်မော်ပြပါ အစီအစဉ်အတိုင်းပြုလုပ်ခွင့် ပေးပါရန်နှင့် အစည်းအဝေးသို့ ဒေသန္တရအုပ်ချုပ်ရေးအဖွဲ့အည်းများမှ အောက်မော်ပြပါ အစီအစဉ်အတိုင်း တတ်ရောက်ပေးနိုင်ရန်အတွက် လေးစားစွာဖိတ်ကြားအပ်ပါသည်။

၃။ အစည်းအဝေးအစီအစဉ်-

3000	လိုးအရာ။		်။ပထမအကြိမ်အဓိကသက်ဆိုင်သူ/ကိုယ်စားလှယ်များ၏သဘောထားဆန္န၊
			အကြံပြုချက်များရယူနိုင်ရန်အတွက် အစည်းအစားအခမ်းအနားကျင်းပခြင်း။
64.8	*		။၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ၊ ၁၇ ရက်၊ သောကြာနေ့။
အချိန်	к.	\mathcal{X}	။နေ့ခင်း ၁ နဒရီမှ၊ ညနေ ၄ နဒရီအထိ။
နေရာ	10 m		။ရွာလယ်ဘုရားမွောရုံ၊ ဘယ်လင်းကျေးရွာ၊ ဘယ်လင်းအုပ်စု။

၄။စီမံကိန်းကြောင့် ထိခိုက်နိုင်မည့်သူများ တွေ့ဆုံဆွေးနွေးပွဲ (Project Affected People Meeting) ကိုလည်း နဘဲပင်ကျေးရွာတွင် သင့်တော်သောနေ့ရက်၊ နေရာ၌ ဆောင်ရွက်ခွင့်ပြုပေးပါရန် တင်ပြအပ်ပါသည်။

လေးစားစွာဖြင့်

FUS SILIS

အောင်နေ့ (Managing Director)

ပူးတွဲ- (၁) EIA လုပ်ငန်းခန့်အပ်လွှာ

မိတ္တာ့ကို- (၁) ခရိုင်ဆုပ်ချုပ်ရေးမှူး၊ စရိုင်အတွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ကျောက်ဆည်မြို့၊ မန္တလေးတိုင်းဒေသကြီး။ (၂) မြို့နယ်အုပ်ချုပ်ရေးမှူး၊ မြို့နယ်အတွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊စဉ့်ကိုင်မြို့နယ်၊ မန္တလေးတိုင်းဒေသကြီး။

() မြို့နယ်အုပ်ချုပ်ရေးမှူး၊ မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ကျောက်ဆည်မြို့နယ်၊ မန္တလေးတိုင်းဒေသကြီး။ (၃) မြို့နယ်အုပ်ချုပ်ရေးမှူး၊ မြို့နယ်အထွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ကျောက်ဆည်မြို့နယ်၊ မန္တလေးတိုင်းဒေသကြီး။

(c) PowerGen Kyaukse Co., Ltd.

(၅) ရုံးလက်ခံ

Myanmar Sustainable Development Engineering Services Co., Ltd.



No.651, Airport Avenue (1), Saw Bwar Gyi Kone, Insein Township, Yangon, Myanmar Admin: +95(9) 78-1277395, +95(9) 69-5160905, Project Team: +95(9) 96-5160905 Sale: +95(9) 69-5410678, +95(9) 7-3175448 Fax: +95(0)1-655-849 Ilmail: contact@m-sdes.com, Website: www.m-sdes.com

စာအမှတ်။ MSDES_၂၇/ဂ၇၀၈၁၈_Mdy RGO ရက်စွဲ။ ၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ (၈) ရက်

ဝန်ကြီးချပ် တိုင်းဒေသကြီးအစိုးရအဖွဲ့ ဓန္တလေးမြို့၈

အကြောင်းအရာ။

။ပတ်စန်းကျင်ထိခိုက်မှုဆန်းစစ်လေ့လာခြင်းနှင့် ပတ်သက်၍ သဘာပေတ်ဝန်းကျင်လူမှုစီးပွား ဆိုင်ရာ အချက်အလက်များအား ကွင်းဆင်းလေ့လာ၊ ကောက်ယူတိုင်းတာခွင့်ပြုပါရန် လျှောက်ထားခြင်း။

ားအထက်ပါ အကြောင်းအရာပါကိစ္စနှင့်ပတ်သက်၍ ကျွန်တော်တို့ မြန်မာစဉ်ဆက်မပြတ်ဖွံ့ဖြိုးမှုအင်ဂျင်နီယာ ဝန်ဆောင်မှု ကုမ္ပဏီသည် ဘဲလင်းဓာတ်အားဖွဲ့ရဲ့ဝင်းအတွင်း PowerGen Kyaukse Co., Ltd. မှ အကောင်အထည်ဖော်ဆောင်ရွက်မည့် ၁၄၅ မဂ္ဂါဝပ်ရှိ သဘာဝဓာတ်ငွေ့အင်ဂျင်သုံး လျှပ်စစ်ဓာတ်အားပေး စက်ရုံစီမံကိန်းနှင့်ပတ်သက်၍ ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ် လေ့လာမှု အစီရင်ခံစာ ရေးသားပြုစုနိုင်ရန်အတွက် ဘာသာရပ်ဆိုင်ရာ ကျွမ်းကျင်ပညာရှင်များဖြင့် စီမံကိန်းဧရိယာ အနီးတစ်ဝိုက်ဖြစ်သော စဉ့်ကိုင်မြို့နယ်နှင့် ကျောက်ဆည်မြို့နယ်အတွင်း သဘာဝပတ်ဝန်းကျင်လူမှုစီးပွားဆိုင်ရာ အချက်အလက် များအား၂၀၁၈ ခုနှစ်၊ ဩဂုတ်လ မှ စတင်၍ ၆ လခန့် အကြာ သဘာဝပတ်ဝန်းကျင်လူမှုစီးပွားဆိုင်ရာ အချက်အလက်များအား ကွင်းဆင်းလေ့လာကောက်ယူတိုင်းတာရန် လိုအပ်ပါသဖြင့် ကွင်းဆင်းလေ့လာကောက်ယူတိုင်းတာခွင့်ပြုပါရန် တင်ပြအပ်ပါ အည်။

လေးစားစွာဖြင့်

2

8614 asoce (Managing Director)

မိတ္တူကို- (၁) ရှေိင်အုပ်ချုပ်ရေးမှူး၊ ရရိုင်အတွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ ကျောက်ဆည်မြို့၊ မန္တလေးတိုင်းဒေသကြီး။

(၂) မြို့နယ်အုပ်ဖျပ်ရေးမှူး၊ မြို့နယ်အတွေထွေအုပ်ချုပ်ရေးဦးစီးဌာန၊ စဉ့်ကိုင် မြို့နယ်၊ မန္တလေးတိုင်းဒေသကြီး။

(၃) မြို့နယ်အုပ်ချူပ်ရေးမှူး၊ မြို့နယ်အထွေထွေအုပ်ချူပ်ရေးဦးစီးဌာန၊ ကျောက်ဆည်မြို့နယ်၊ မန္တလေးတိုင်းဒေသကြီး။

(ç) PowerGen Kyaukse Co., Ltd.

(၅) ရုံးလက်ခံ



၁၄၅ မဂ္ဂါဝပ် သဘာပဓာတ်ငွေ့ အင်ဂျင်သုံး လျှပ်စစ်ဓာတ်ဓါတ်အားပေးစက်ရုံ စီမံကိန်း (ဘယ်လင်း ကျေးရွာ၊ စဉ့်ကိုင်မြို့နယ် ၊ ကျောက်ဆည် ခရိုင် ၊ မန္တလေးတိုင်းဒေသကြီး



Myanmar Sustainable Development Engineering Services Co., Ltd.



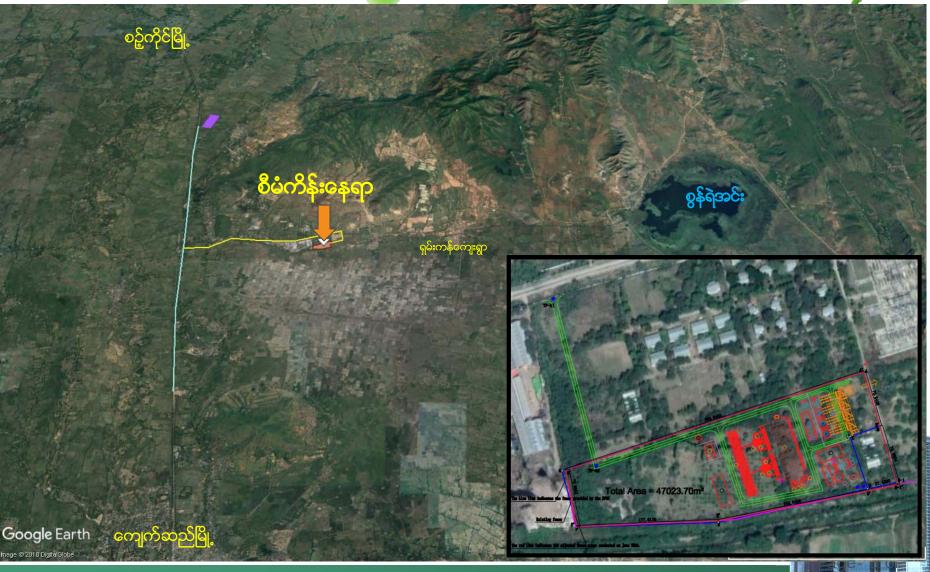
National Infrastructure Holdings Consortium 10th August 2018

Go together for long run ...



	၁၄၅ မဂ္ဂါဝပ် သ <mark>ဘာဝဓါတ်ငွေ့</mark> ဒ	<mark>ာင်ဂျင်</mark> သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း
	သတ <mark>င်းအခ</mark> ျ	က်အလက်အကျဉ်း
စဉ်	အကြောင်းအရာ	
C	စီမံကိန်းတည်နေရာ	ဘယ်လင်းပင်မဓါတ်အားခွဲရုံပိုင်မြေနေရာ၊ ဘယ်လင်းကျေးရွာ၊ ကျောက်ဆည်ခရိုင်၊ မွန္တလေးတိုင်းဒေသကြီး
J	လျှပ်စစ်ဓါတ်အားတုတ်လုပ်မည့်နည်းပညာ	သဘာဝဓါတ်ငွေ့အင်ဂျင်
9	အင်ဂျင်အမျိုးအစား	Wärtsilä W 18V50SG (ဖင်လန်နိုင်ငံ))
9	ထုတ်လုပ်နိုင်သည့် လျှပ်စစ်ဓါတ်အား	၁၄၅ မဂ္ဂါဝပ် (၁၈ မဂ္ဂါဝပ် x ၈လုံး)18V50SG
	စီမံကိန်းအကောင်အထည်ဖော်သူ	National Infrastructure Holdings Co., Ltd., Myanmar Chemical and Machinery Co., Ltd., and SEPCO3
ງ	စီမံကိန်း ရင်းနှီးမြုပ်နံမှု ငွေကြေးပမာဏ	အမေရိကန်ဒေါ် လာ သန်း ၁၀၀ မှ ၁၂၀ ကြား
હ	စီမံကိန်း ဧရိယာ	47023.70 m ²
γ	စီမံကိန်းကာလ	၅ နှစ်
ଚ	တည်ဆောက်ရေးကာလ	၁၀ လ (ခန့်မှန်း)
	စတင်လည်ပတ်မည့်အချိန်	၂၀၁၉ ခုနှစ် ဖေဖော်ဝါရီလ
C	သဘာဂဓာတ်ငွေ့အသုံးပြုမှု	တစ်ရက်လျှင်ကုဗပေ သန်း ၃၀
00	ရေဆိုးမွန်းမံပြုပြင်မှုစန စ်	ပါရှိပါသည်။
00	အသံဆူညံမှုထိန်းနရံ	ပါရှိပါသည်။

၁၄၅ မဂ္ဂါဝပ် သ<mark>ဘာဝဓါတ်ငွေ့ အင်ဂျင်</mark>သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း <mark>စက်ရုံတည်ဆော</mark>က်ရေးစီမံလျာထားချက်

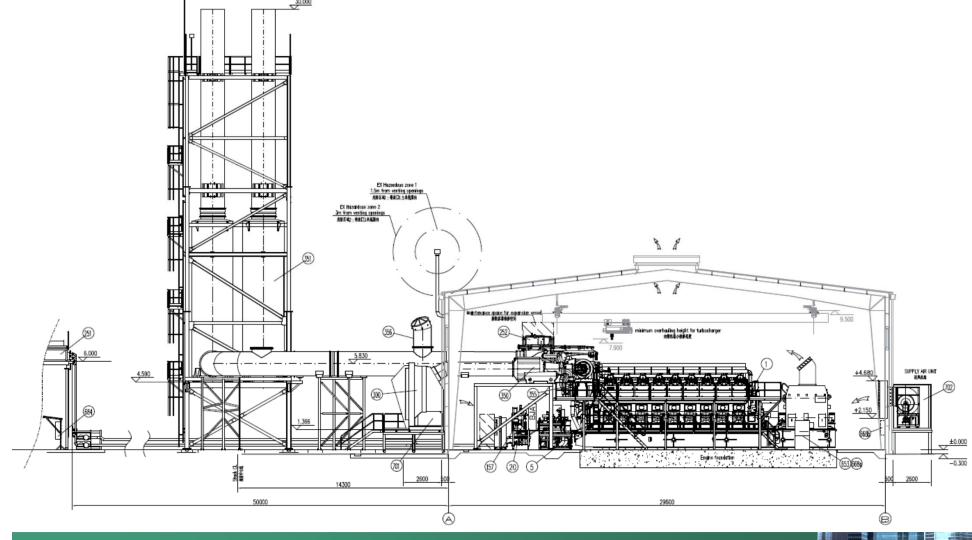


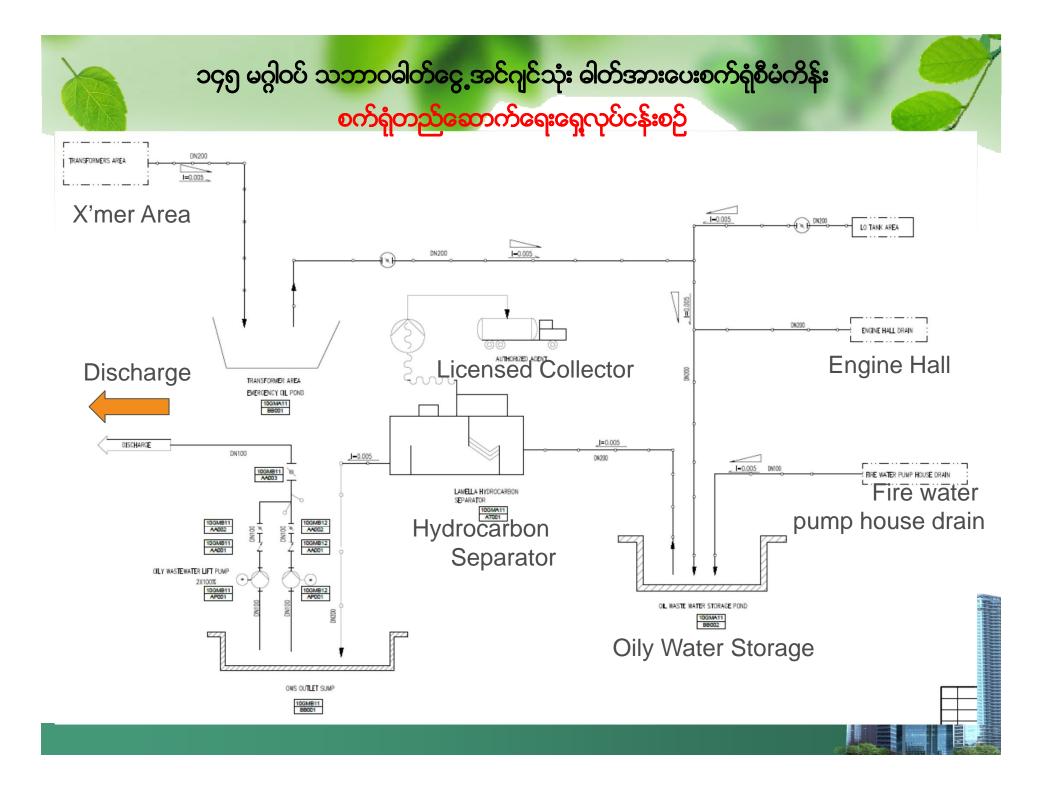
12 August 2018

၁၄၅ မဂ္ဂါဝပ် သ<mark>ဘာဝဓါတ်ငွေ့ အင်ဂျင်</mark>သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း <mark>စက်ရုံတည်ဆော</mark>က်ရေးစီမံလျာထားချက်



၁၄၅ မဂ္ဂါဝပ် သဘာဝဓါတ်ငွေ့ အင်ဂျင်သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း စက်ရုံတည်ထောက်ရေးရှေ့လုပ်ငန်းစဉ်







145 MW GEPP Kyaukse Site Visit – 06Jul2018



Update Construction Site Condition



Soil Test

Access Road from Main Road for Heavy Cargo Route Broken Concrete Fence Post by SEPCO3



Fence between Plywood Factory & Our Project Area Sewage Outlet of SEPCO3 and Sump Pit

Temporary Drainage along the Access Road ၁၄၅ မဂ္ဂါဝပ် သဘာဝဓါ<mark>တ်ငွေ့ အင်ဂျင်</mark>သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း စီမံကိန်း တည်နေရာ၊ <mark>မြေပြင်</mark>အနေအထာနှင့် ဆောင်ရွက်<mark>ထားရှိမ</mark>ှု



Sewage Outlet of SEPCO3

SEPCO3 Container Offices & Temporary Gen-set



SEPCO3 Container Offices & Temporary Gen-set

၁၄၅ မဂ္ဂါဝပ် သဘာဝဓ<mark>ါတ်ငွေ့ အင်ဂျင်</mark>သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း စီမံကိန်း <mark>တည်န</mark>ေရာ မြေပြင်အနေအထား



Two Houses to be renovated



Project Schedule and ESIA Report preparation Timeline

Myanmar 145 MW Gas Power Station Project Schedule										
Drainat Activities			4	2018				20	2019	
Project Activities	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
General									_	
Gas Engine and Auxillary System										
Generator and Auxillary System										
Demineralized Water system									_	
Dosing System										
Electrical leadout and Main Transformer										
AIS system										
Main Control and DC system									_	
Gas Infrastrucutre schedule										
Auxillary power system										
Electrical cable and accessries									_	
Waste water treatment system										
Firefighting system										
HVAC system									_	
Intake water system										
Unit Commissioning	-									

MSDES Activities	2018				
	August	September	October	November	December
Intial Field Survey			_		
Environment/Health and Social Survey					
Public Hearing (Initial Stage)			_		
Scoping Report Submission to ECD				_	
Impact Assessment and mitigation					_
EMP and GRM preparation					
ESIA report Preparation					
Public Hearing (EIA stage)					
ESIA Report Submission to ECD					

၁၄၅ မဂ္ဂါဝပ် <mark>သဘာဝဓါတ်ငွေ့ အင်ဂ</mark>ျင်သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း သ<mark>တင်းအ</mark>ချက်အလက်အကျဉ်း

POWERGEN KYAUKSE COMPANY LIMITED

NO.(36), THEIN PHYU ROAD, PAZUNDAUNG TOWNSHIP, YANGON, MYANMAR. TEL: (95-1) 8610654, 8610656~59. FAX: (95-1) 200273, 295067

" To Whom It May Concern "

We, PowerGen Kyaukse Co., Ltd., has been starting to implement "145 MW Gas Engine Power Plant (145 MW GEPP)" in Belin village, Sintgaing Township, Kyaukse District, Myanmar in order to fulfill national power demand and supply of electricity in industrial development after receiving Letter of Award (LOA) from the Ministry of Electricity and Energy on 7.5.2018.

It is, therefore, we have appointed the following company to carry out Environmental and Social Impact Assessment (EIA) for our development project, 145 MW GEPP (Kyaukse).

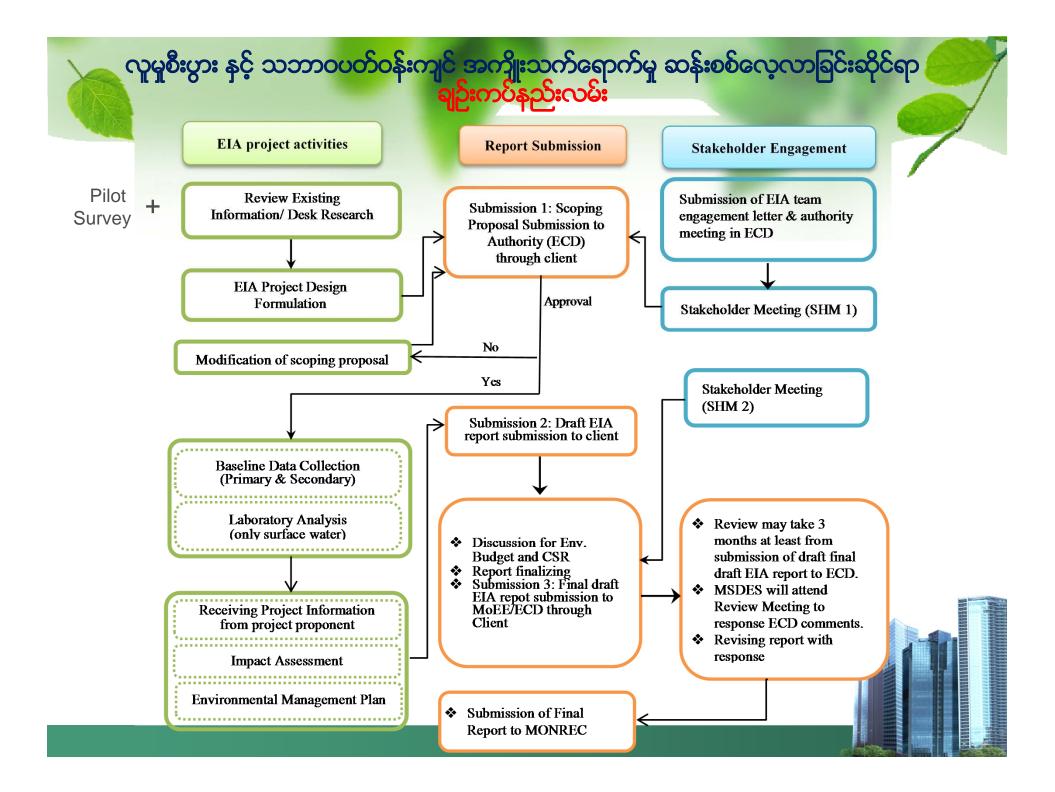
Myanmar Sustainable Development Engineering Services Company Ltd.

No.651, Airport Avenue Lane 1, Saw Bwar Gyi Kone, Insein Tsp, Yangon, Myanmar. Sales: +95(9)69-5410678, +95(9)7-3175448, Admin: +95(9)78-1277395, +95(9)69-5160905 Project Team: +95(9)96-5160905 Email : nanda@m-sdes.com/contact@m-sdes.com

Best Regards

Yee Yee Htwe Director Myanmar Chemical & Machinery Co., Ltd. (On behalf of PowerGen Kyaukse Co., Ltd.)





၁၄၅ မဂ္ဂါဝပ် သ<mark>ဘာဝဓါတ်ငွေ့အင်ဂျင်</mark>သုံး ဓါတ်အားပေးစက်ရုံစီမံကိန်း EIA ဘာသာရပ<mark>်ဆိုင်ရ</mark>ာကျွမ်းကျင်ပညာရှင်များပါဝင်မှု

EIA study component	Key Practitioner	TRC No.
Water Environment / EIA Project Design & Management	U Aung Nanda	10112
Environmental Science and Engineering Management Plan/System (EMP/EMS)	U Aung Nanda	10112
Noise Assessment	U Aung Nanda	10112
Legal Framework/ Law & Policy requirement	Chit Su San	10117
Air Quality Assessment	MSDES/REM	TBA
Biodiversity (Flora)	Prof. Dr. Myint Aung	10115
Biodiversity (Fauna)	Dr. Sai Sein Lin Oo	TBA
Socio-economic Impact Assessment (SIA)	Prof. Dr. Than Aung Htwe	10116
Social Management Plan	Prof. Dr. Than Aung Htwe	10116
Cultural Heritage Assessment (If required)	Dr. Pyiet Phyo Kyaw	10114
Health Impact Assessment	Dr. Kyaw Maung Maung Hein	10118
GIS/RS	Htet Akar Soe	10113
Engineering Analysis	Win Myint and Aung Nanda	TBA
Safe Working Practice	MSDES Team	
Waste Management	Aung Nanda	1
Social Surveyor team	MSDES Team	

ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်လေ့လာခြင်းဆိုင်ရာ နယ်ပယ်သတ်မှတ်ခြင်း

➢ ဝန်းကျင် လူမှုစီးပွား လေ့လာဆန်းစစ်မှု နယ်နိမိတ် ။ ။ စီမံကိန်းဧရိယာနင့်ဆက်စပ် ၃ ကီလိုမီတာ အဝန်းအဝိုင်းအတွင်းရှိ သဘာဝ ဝန်းကျင် နှင်္ လူမှုစီးပွားထိခိုက်နိုင်ခြေများကို လေ့လာဆန်းစစ်သွားပါမည်။

မြေဆီလွှာ နှင့် မြေအောင်းတွင်းရေ ဆိုင်ရာ ကွင်းဆင်းလေ့လာမှု (Soil and Ground water Survey)

မြစ်ရေ၊ ချောင်းရေ နှင့် ပါတ်သက်သော ကွင်းဆင်းလေ့လာမှု (Surface water)



အပင် နှင့် သတ္တဝါ တို့၏ ဂေဟစနစ် ဆိုင်ရာ ကွင်းဆင်းလေ့လာမှု (Fauna, Flora and Ecology Survey)



ယဉ်ကျေးမှုအမွေနှင့် ရှေးဟောင်းသုတေသန ဆိုင်ရာ ကွင်းဆင်းလေ့လာမှု (Optional) (Cultural Heritage and Archaeological)

လူမှုစီးပွား နှင့် ကျန်းမာရေး ဆိုင်ရာ ကွင်းဆင်းလေ့လာမှု (Socioeconomic and Health Survey)

) သယ်ယူပို့ဆောင်ရေး ဆိုင်ရာ ကွင်းဆင်းလေ့လာမူ (Traffic Survey)

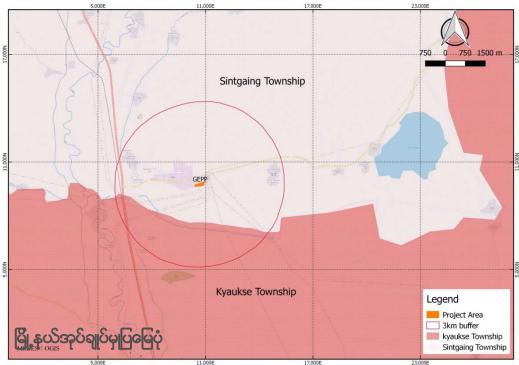
ပတ်ဝန်းကျင်လေထုအရည်အသွေး နှင့် အသံဆူညံမှု ဆိုင်ရာ ကွင်းဆင်းလေ့လာမှု (Ambient Air Quality and Noise Survey)



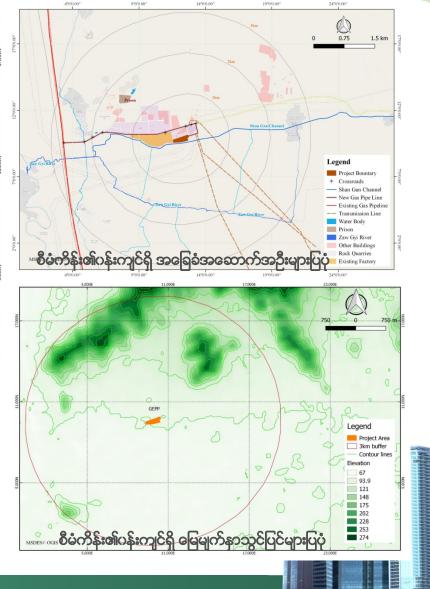
Mechanism)

မြေယာရယူမှုဆိုင်ရာ ထိခိုက်နစ်နာမှုများ လေ့လာခြင်း နှင့် ထိခိုက်မှု သက်သာလျော့ပါးရေး အစီအမံများ (Land Acquisition and Grievenance

Existing Environmental & Social Setting



□ Area of interest, 3 km radius from project area, situated within the administrative boundary of Sint Gaing and Kyauk Se Township.

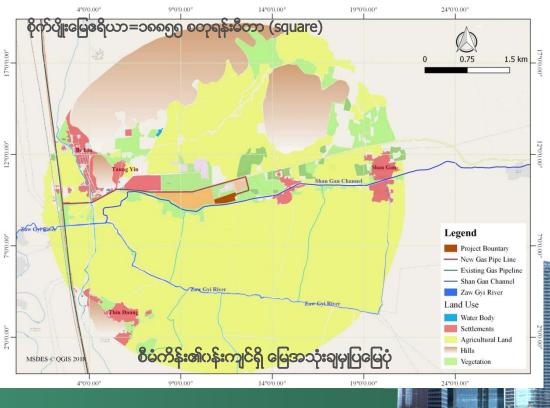


Existing Environmental & Social Setting

Direction Name of Possible receptor		Distance from GEPP	Remark
	Belin Substation	0.36km	
North	Kein Na Ya Taung	2km	
	Agricultural Land		
Southeast	Agricultural Land		
	Unknown Village (V1)	1km	
East	Shan Gan Village	2.8km	
	Agricultural Land		
	Agricultural Land		
	Shan Gan Irrigation channel	Adjacent to	Flowing from
South		GEPP	East to West
	Zaw Gyi River		Flowing from
			West to East
Southwest	Thin Daung Village	2.7km	
	Existing Factory	Adjacent to	
		GEPP	
West	Taung Yin Villagge	2km	
	Belin Village	2.3km	
	Housings	1.3km	
	Agricultural Land		
Northwest	Gravel Production	1.8km	
	Unknown Warehouse	1.6km	

Significant land-use practice in the vicinity of proposed project is agricultural land which is followed by commercial factories and residential area

- □ Major Land use activities within the vicinity of project includes residential areas, agricultural lands, factories, substation, hills and irrigation channel
- □ Proposed project site is adjacent to the Shan Gan irrigation channel and Shwetangar Channel, originated from Sun Ye Inn, which would probably be one of the distribution channels of harvested rainwater for agricultural activities and other domestic usage.
- □ The other source of primary water supply is achieved from drainage network of Bobae , entering into Zaw Gyi River.



Pilot Site Visit (7.8.2018 – 9.8.2018)



- **Getting up Environmental Sampling Points**
- □ Initial Social screening survey
- □ Inform and discuss project activities with local authorities
- Tentative Environmental and Social Field Monitoring period will be during 25.8.2018 – 31.8.2018.
- Device the Public Consultation will be tentative in the last week of August 2018.







List of locations visited during pilot survey

- 1. Bellin Village
- 2. Project Site
- 3. Taung Lwel Village
- 4. Taung Yin Village
- 5. Na Bae Pin Village
- 6. Sun Ye Inn
- 7. Drainage Network (Shan Kan, Shwe Tha Ngar)



Land Acquisition in Past







 1^{st} time land acquisition in 2008 PAP = 16

 3^{rd} time land acquisition in 2010 PAP= 2

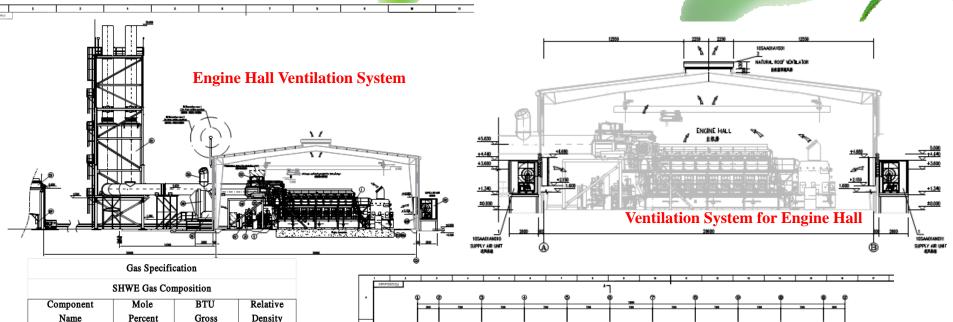






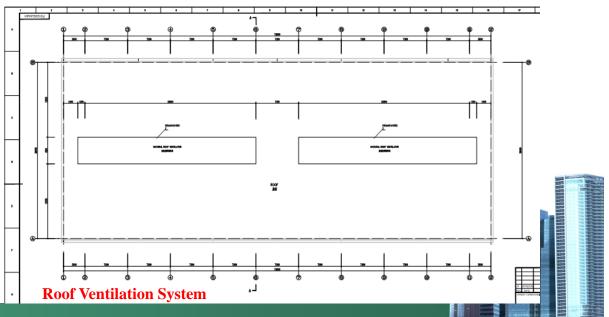


သဘာဝဓါတ်ငွေ့အင်ဂ<mark>ျင်ဓါတ်</mark>အားပေးစက်ရုံ (145 မီဂါဝပ်) စီမံကိန်း Gas Specification and Ventilation System

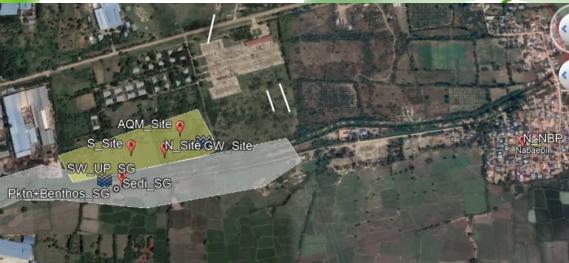


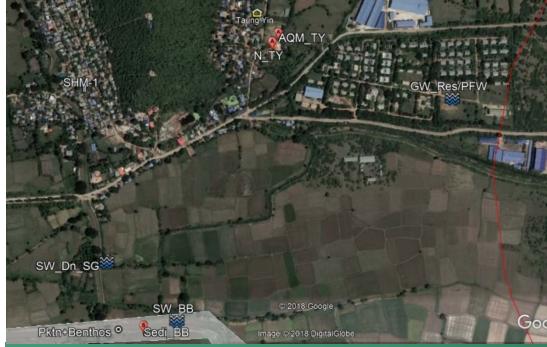
Component	Mole	BTU	Relative
Name	Percent	Gross	Density
C6 + 47/35/17	0.0199	1.05	0.0007
PROPANE	0.0297	0.75	0.0005
i- BUTANE	0.0109	0.36	0.0002
n - BUTANE	32.2 PPM	0.11	0.0001
i - PENTANE	49.7 PPM	0.2	0.0001
n - PENTANE	0.0000	0.00	0.0000
NITROGEN	0.2218	0.00	0.0021
METHANE	99.5529	1007.81	0.5514
CARBON DIOXIDE	0.0491	0.00	0.0007
ETHANE	0.1073	1.9	0.0011
TOTALS	100	1012.18	0.557
Compressibility Factor	(1/7)@ 14.73000	PSIA & 60.0 DE	G.F=1.100198
Base Pressures =		14.73	PSI (A)
Gross Dry BTU =		1014.19	Corrected/Z
Real Relative Density	Gas =	0.5578	
Un-normalized Mole P	ercent =	99.874	
WOBBE =		1357.91	

Low potential of SO2 emission



Environmental Sampling Locations







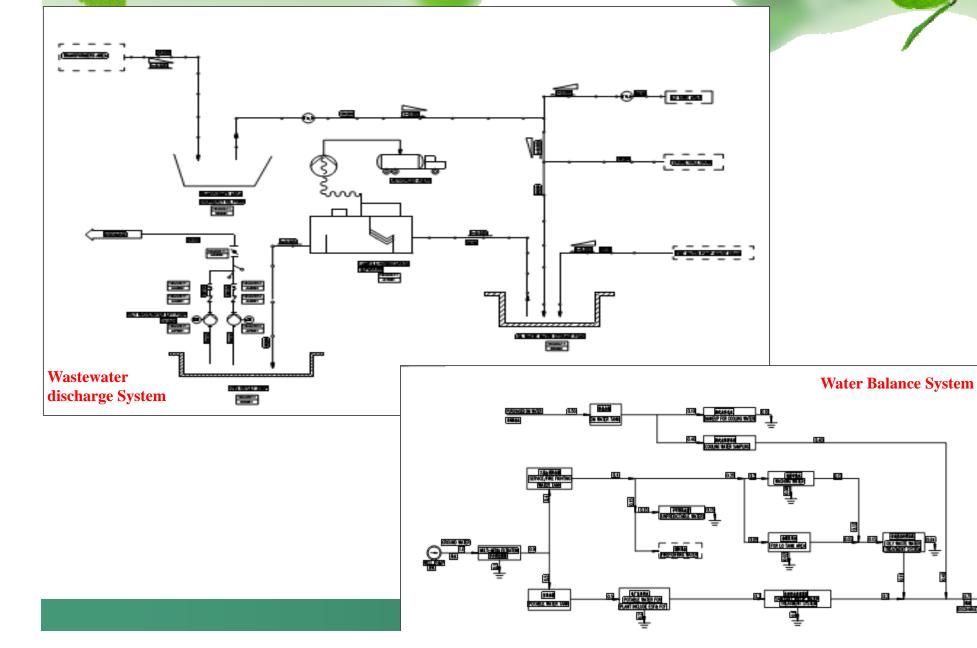
Preliminary Assessment of potential impacts by 145 MW GEPP

SECTION	PROJECT	POTENTIAL IMPACT	SIGNIFICANCE O rating is negative u specifi	nless otherwise ed)	
	PHASE		UNMITIGATED	MITIGATED	
Flora & Fauna	Construction	Potential faun a loss due to site clearance & pipeline consturction	Negligible		
Piora & Paulia	Operation	Potential faun loss due to human disturbance	Moderate		
Surface Water, Ground Water	Construction	Potential water quality depletion and fauna damage due to sewage water discharge and runoff	Moderate		
Quality & Aquatic fauna	Operation	Potential water quality depletion and fauna damage due to sewage water discharge and runoff and Oil and chemical spill	Moderate		
Air	Construction	Particulate matters (Dust) emission by building construction, movement of vehicles and soil stripping and exhaust gases emission from non-road vehicles and equipment	Minor	Negligible	
		NO2 /CO2 emission from stack, exhaust gas emission and potential gas leak age from pipeline	High		
		Cumulative impacts on air quality by means of power plant operation and nearby factories	High		
Noise and vibration	Construction	Activity of vehicles and construction work	Minor	Negligible	
	Operation	Operation of Gas Engine activity	Moderate		
		Potential Land Acquisition issues on nearby agricultural land	Moderate		
Land	Construction	Impact on Landscape and Land use Change	Moderate		
		Potential land contamination by waste disposal	Minor	Negligible Negligible	
	Operation	Potential soil contamination by solid and liquid waste disposal	Minor	Negligible	

Preliminary Assessment of potential impacts by 145 MW GEPP

SECTION	PROJECT PHASE	POTENTIAL IMPACT	SIGNIFICANCE C rating is negative speci	unless otherwise fied)
			UNMITIGATED	MITIGATED
Cultural /Heritage Resources	Construction	Potential disturbance on local cultural resources by construction activities	Minor	Negligible
	Construction	Noise and vibration	Moderate	
Occupational health & Safety	Operation	Noise and Vibration	Moderate	
	Operation	Worker health and safety during operation	Moderate	
Population and demographic change	Construction	Population and demographic change due to influx of migrant workers	Moderate	
	Operation	Population and demographic change due to Influx of migrants workers	Moderate	
Public access and movement	Construction	Restriction on public access due to increase of traffic volume and Road Safety	Moderate	
Public access and movement	Operation	Restriction on public access due to increase of traffic volume and Road Safety	Moderate	
Employment and Skill	Construction	Beneficiary on employment and skill development	Major –Positive	
development	Operation	Beneficiary on employment and skill development	Major –Positive	
Local Business	Construction	Beneficiary on local business	Moderate – Positive	
Local Business	Operation	Beneficiary on local business	Moderate – Positive	
Country Energy Sector	Operation	Beneficiary on energy sector	Major Positive	

သဘာဝဓ<mark>ါတ်ငွေ့ အင်ဂျင်ဓါတ်အား</mark>ပေးစက်ရုံ (145 မီဂါဝပ်) စီမံကိန်း Water Balance and wastewater discharge System



Ш



ကျေးဇူးတင်ပါသည်။ လမ်းညွှန်မူခံယူပါသည်။



12 August 2018



The Ministry of Natural Resources and Environmental Conservation, hereby, issues this certificate to the organization under Environmental Impact Assessment Procedure, Notification No. 616/2015.

(ပတိဝန်းကျင် ထိခိုက်မှုဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း၊ အမိန့်ကြော်ငြာစာအမှတ်၊ ၅၁၆/၂၀၁၅ အရ သယံစာတနှင့် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာနသည် ဤအထောက်အထားလက်မှတ်ကို အဖွဲ့အရည်းအား ထုတ်ပေးလိုက်သည်။)

(a) Name of Sirganization (အဖွဲ့အသေးအမည်)

(b) Name of the representative in the organization (အဖွဲ့အရည်းကိုယ်စားလှယ်၏ အမည်)

(c) Citizenship of the representative in the organization (အဖွဲ့အရည်းကိုယ်စားလှယ်၏နိုင်ငံသား)

- (d) Identity Card /Passport Number of the representative person in the organization (အဖွဲ့အစည်းကိုယ်စားလှယ်၏ မှတ်ပုံတင်/ နိုင်ငံကူးလက်မှတ် အမှတ်)
- (e) Address of organization (ဆက်သွယ်ရန်လိပ်စာ)
- Type of Consultancy (f) (အကြံပေးလုပ်ကိုင်မှုအမျိုးအစား)

(g) Duration of validity (သက်တမ်းကုန်ဆုံးရက်)

Myanmar Sustainable Development Engineering Services Co., Ltd. U Aung Nanda

Myanmar

12/ Sa Kha Na (Naing) 001504

No. 21 (I), U Kyaw Hla Street, 7 Mile, Mayangone Township, Yangon. nanda.msde@gmail.com, nanda@m-sde.com, 09 6160905, 09 799671216 Organization

31 March 2018

Director General Environmental Conservation Department Ministry of Natural Resources and Environmental Conservation

Areas of Expertise Permitted (ခွင့်ပြုသည့် ကျွမ်းကျင်မှုနယ်ပယ်များ)

- 1. Ecology and Biodiversity
- 2. Facilitation of Meeting
- 3. Land Use
- 4. Legal Analysis
- 5. Modeling for Water Quality
- 6. Noise and Vibration
- 7. Socio-Economy
- 8. Cultural Heritage
- 9. Environmental Science & Engineering Management
- 10. Mangrove Ecology





Proven Record of Customer Satisfaction

 Environmental and Social consideration into project design of rice mill complex;

Design-oriented ESIA

 Sector-wise study with multidisciplinary;

Total number of team member: 89.

Myanmar Japan Rice Industry Co., Ltd. No. JV (2) Building, Lan Thir Street, Seikkan Nal Myay, Lamadaw Township, Yangon

To Whom it May Concern

We, Myanmar Japan Rice Industry Company Limited (MJRI), are hereby writing to recommend the provision of ESIA services by Myanmar Sustainable Development Engineering Services Co., Ltd (MSDES).

MJRI is a joint venture of Myanmar Agribusiness Public Corporation (MAPCO) and Mitsui & Co., Ltd. We have utilized MSDES's environmental consulting services for the development of phase I of 500 Ton/Day Integrated Rice Mill Complex (IRCP) Project in Twantay Township, Yangon and has been completely satisfied with the quality of its deliverable and attention provided to key details. We observed that MSDES can absolutely fulfill to meet the expectation of international organization in terms of project milestones/schedule. They have shown strength of team work, technical knowledge and collaboration skills between each study component. They have been responsive to MJRI's requirement and project schedule constraints.

A special high light in evaluation of their services is that MSDES actively involves in technical explanation and meeting with concerned authorities until ESIA project is successfully completed. In ESIA for phase I of 500 Ton/Day Integrated Rice Mill Complex (IRCP), MSDES had conducted following studies;

- 1) Legislation requirement,
- 2) Geology (Sediment and Soil Quality study),
- 3) Surface Water, Ground Water Assessment,
- 4) Biodiversity and Ecological Assessment,
- 5) Noise Impact and Air Quality Assessment,
- 6) Socio-Economic Survey,
- 7) Wastes Management,
- 8) Environmental and Social Management Program,
- 9) Corporate Social Responsibility (CSR),
- 10) Safe Working Practice and
- 11) General outline for Fire Safety.

Sincerely

Mr. Mindred Asano Director Myanmar Japan Rice Industry Co., Ltd

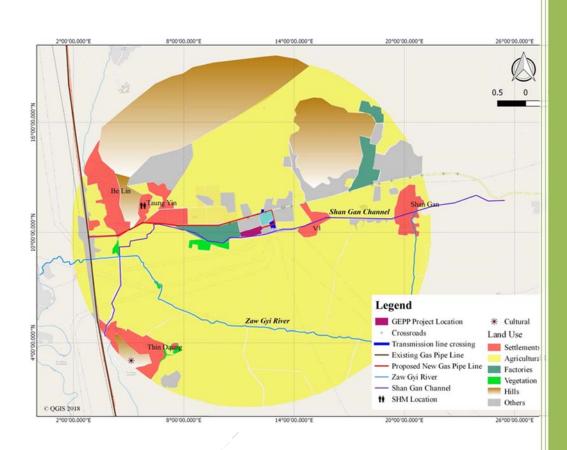


U Ye Min Aúng Managing Director Myanmar Japan Rice Industry Co., Ltd

17 July 2018

EIA Technical Proposal for Development of 145 MW GEPP, Belin

Doc. No.: TP-MSDES-86/240618_EIA_Power Plant_GEPP_Belin (ver 2.0)





Prepared by Aung Nanda Myanmar Sustainable Development Engineering Services Co., Ltd. 7/15/2018



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1 Brief Project Description

Introduction

The NIHC Consortium which is composed of National Infrastructure Holding Co., Ltd and Myanmar Chemical & Machinery Co., Ltd. have been awarded a contract by the Electric Power Generation Enterprise (EPGE) of the Myanmar Ministry of Electricity and Energy to construct and operate for a period of five (5) years from commencement date of operation a 145 MW Gas-fired Engine Power Plant at existing Power Plant Yard at Belin, Kyaukse Township, Mandalay Region, Union of Myanmar. National Infrastructure Holding Co., Ltd. will be anchor member of the Consortium.

Project Site

Proposed Gas Engine Power Project (GEPP) is located in Bellin Village, Saintgaing Township, Mandalay. The proposed project area is about 3 km away from Yangon-Mandalay Highway. The project is intended to develop in the existing compound of Ministry of Energy, occupying area of 44,159.13 m². Geographical coordinate points of project boundary is presented as per below and project site location is as shown in figure (1).

Coordinate Point

Fence boundary outcomes (NGS84 coordinate system) provided by the EPG8	Pence boundary outcomes (myanmar coordinate system) provided by the EPGE
A 96:9:11.560015,21:40:7.260007 85.64 B 96:9:12.306304,21:40:5.070930 84.64 B-1 96:9:13.085956,21:40:2.784032 81.51 C 96:9:11.036329,21:40:4.615927 84.44 D 96:9:11.636338,21:40:2.496922 83.73 E 96:9:5.330012,21:40:1.010029 84.19 F 96:8:59.160328,21:40:0.710935 85.00 G 96:8:58.480624,21:40:3.000079 85.51 TP01 96:8:57.946621,21:40:10.018921 87.51 TP02 96:8:59.945360,21:40:3.279625 85.09	A 205385.547 2398858.605 85.64 B 205405.867 2398791.739 84.84 B-1205427.013 2398721.113 81.51 C 206388.675 2398778.484 84.44 D 205390.522 2398712.866 83.73 E 205202.852 2398670.576 84.19 F 205025.212 2398664.633 85.00 G 206006.955 2398735.438 85.51 TP01 204995.661 2398741.543 85.09
Fence boundary outcomes (NGS84 coordinate system)	Pence boundary outcomes (symmar coordinate system)
adjusted fence range	adjusted fence range
A' 96:9:11.553347,21:40:7.258008 85.64 B' 96:9:12.302536,21:40:5.066350 84.84 B-1' 96:9:13.107021,21:40:2.686391 81.51 C' 96:9:11.028329,21:40:4.615927 84.44 D' 96:9:11.840483,21:40:2.409175 83.73 E' 96:9:5.320719,21:40:1.079741 84.19 F' 96:8:59.159243,21:40:0.723682 85.00	A' 205385.547 2398859.605 85.64 B' 205405.867 2398791.739 84.84 B-1' 205427.672 2396718.047 81.51 C' 205368.675 2396778.484 84.44 D' 205391.069 2396710.182 83.73 E' 205202.702 2398678.701 84.19 F' 205025.195 2398664.998 85.00 G' 205011.473 2398736.386 85.51





Figure 1. Project Site Location

General Information on GEPP

The modular power plant is designed to use natural gas as the main fuel. The proposed modular plant is designed for base load operation and is equipped with 8 numbers of WARTSILA engines (18V50SG type) as a prime mover. Plant installed capacity and designed output power is (145) MW (8 units x 18 MW). The mechanical and electrical systems are designed with codes and standards by WARTSILA. Ministry of Energy provides natural gas (30) million cubic feet/day to operate GEPP. Generated electricity is scheduled to be supplied from coming February, 2019 after (10) months of construction. Generated power by the proposed GEPP will be supplied to the National Power grid through the existing power distribution of Belin Substation.

According to the agreement with EPGE, plant will be run on 100% load for (7) months and on 50% load for (5) months of the year. Type of constructions & establishments to be involved in the Construction period will be Wartsila Gen-set Building, Switchyard, Main Gas Skid, Control Shed and MOGE Staff Quarters.



Description of Environmental Setting Within (3) Kilometer from Project Area

Area of interest, 3 km from project area, includes residential areas, agricultural lands, factories, substation, hills and irrigation channel (Table 1 and Figure 2). Being located near the boundary of two townships, Sintgaing and Kyaukse, environmental and socials component that need to be assessed in study of EIA might have concerns from authorities of both townships. Significant land-use practice in the vicinity of proposed project is agricultural land which is followed by residential area. The smallest facture of land use is examined as industrial use and gravel production. Within study area, primary settlements of six villages and population density of Belin and Thin Daung village are relatively higher than that of other villages. Northward direction of study area is primarily covered with elevated land, namely Kein Na Ya Taung (m.s.l 384 meter), which is naturally formed as concave-shape-wind-breaking fence in winter time. In prevailing downwind directions of winter and monsoon (i.e., northward and southward), no residential area is observed.

Direction	Name of Possible	Cordinate	Distance from GEPP	Remark
North	Belin Substation	21°40'10.30"N, 96° 9'13.41"E		
	Kein Na Ya Taung,	21°40'59.36"N 96° 8'30.87"E	2 km	
	Agricultural Land	/		
Southeast	Agricultural Land			
East	unknown village (V1)	21°40'3.43"N 96° 9'42.27"E	1 km	
	Shan Gan Village	21°40'17.38"N 96°10'42.51"E	2.8 km	
	Agricultural Land			
South	Agricultural Land			
	Shan Gan irrigation channel		Adjacent to GEPP	Flowing from East to West.
	Zaw Gyi River			Flowing from West to East
Southwest	Thin Daung village	21°38'55.57"N 96° 8'0.44"E	2.7 km	
West	Existing Factory		Adjacent to GEPP	
	Taung Yin village	21°40'18.22"N 96° 8'0.01"E	2 km	

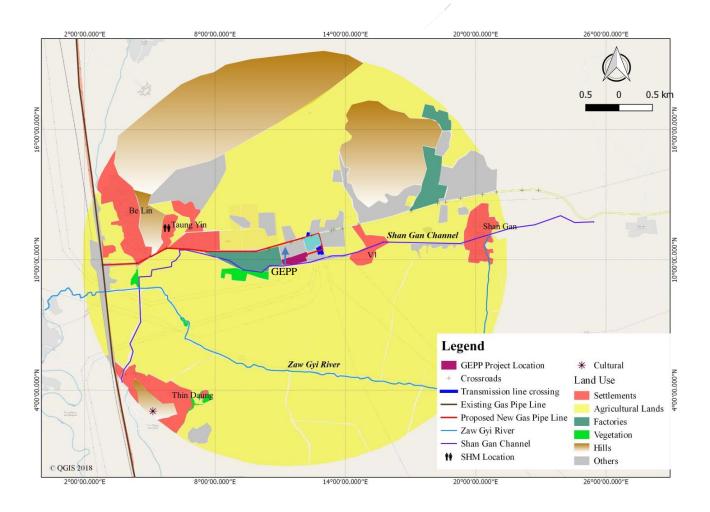
Table 1. Information of possible receptor within (3) km



	Belin village	21°40'25.06"N	2.3 km	
		96° 7'38.04"E		
Northwest	Housings	21°40'10.66"N	1.3 km	
		96° 8'15.86"E		
	Agricultural Land			
	Gravel Production	21°40'43.85"N	1.8 km	
		96° 8'17.19"E		
	Unknown warehouse	21°40'19.19"N	1.6 km	
		96° 8'13.78"E		

Gas Pipeline

10" New gas pipe line (approximately 4.80 miles) will be constructed by the successful bidder along the main street from Tawma Off-take point to project site. According to the project information provided by project proponent, proposed gas pipe line is passed throughout the residential areas, including public access road to connect the existing gas pipeline. It has potential to have effect on community safety.







Water Supply

Proposed project site is adjacent to the Shan Gan irrigation channel, originated from Sun Ye Inn, which would probably be one of the distribution channels of harvested rainwater for agricultural activities and other domestic usage. The other and primary water supply is achieved from drainage network of Zaw Gyi River. If the industrial effluent is directly discharged into the Shan Gan Drainage, water-receiving-agricultural land can be affected by the pollutant. Ecology of agriculture land and downstream water user might have consequential effect from such a direct discharge from power plant.

2 Scope of Works

The EIA investigation shall include the tasks in following sections outlined.

2.1 Policy, Legal and Institutional Framework

This chapter discusses the policy, legal and institutional framework related to environmental and social management of this Project in substantial details. MSDES will review and update the information in the Scoping Report and Baseline Report, and will clearly identify applicable international and national guidelines and standards that will need to be compliance by the Project as targets for its environmental and social performance both during project pre-construction, construction, operation and decommissioning phases.

MSDES consultant will have responsibility to receive corporate management policy regarding with environmental, social and CSR after discussion with the project developer. The final corporate environmental and social policy, approved by the management of the project developer, will be applied in sustainable management of project developer throughout the project cycle.

Under Section 7 of the Environmental Conservation Law and Articles 52 and 53 of the Environmental Conservation Rules of the Republic of the Union of Myanmar, The Consortium is required to undertake an EIA to obtain an Environmental Compliance Certificate (ECC) for the proposed Project. The Project will be undertaken in line with a number of national standards and laws. Local laws relating to EIA include:

- Environmental Conservation Law (2012);
- Environmental Conservation Rules (2014);
- National Environmental Quality (Emission) Guidelines (2015); and
- Environmental Impact Assessment Procedure (2015).



2.2 **Project Alternatives**

Report on project alternative requires input of developers like environmental and social consideration to eliminate or reduce negative impacts in design phase and project cycle; MSDES will recommend alternative for environmental management as well. Closer distance to Yangon downtown area and neighboring settlement area is major key factor that needs to be taken account of alternative consideration in sustainable development of proposed 145 MW GEPP Project. MSDES Consultant will discuss with the project developer to verify and confirm various aspects of project relevant to the ESIA.

The following subjects will be covered in the discussion:

- 1) Project location, land acquisition and project boundaries;
- 2) Project components and scope of works in all phase of the project development;
- 3) Project schedule and project design; Environmental and social consideration;
- 4) Project alternatives in engineering design and project management (e.g., stack height, gas pipe line, pollution control, etc.)
- 5) Question and Answer based on Engineering Design and project management;
- 6) Fire and Electrical Hazard Safety; Community Safety;
- 7) Emergency Response Plan
- 8) Corporate Social Responsibilities and local employment;
- 9) Engagement in Public Consultation Meeting;
- 10) Emission Control Facilities (e.g., waste treatment, air pollution); and
- 11) All other relevant information necessary.

2.3 EIA Study Boundary Area

MSDES team will conduct field surveys, in addition to all available secondary data and to collect primary data on the surrounding environment of project site.

The objective of the surveys is to achieve extensive understanding on the existing environmental and social conditions of the surrounding area prior to the project development. Any changes reflecting from project development are expected to be detected and monitoring how environmental and social



condition differs under pre and post-development condition thereby leading to development of effective Environmental Management Plan (EMP).

Range of ESIA study: Field surveys will include both environmental and social surveys within **3 km** range of radius from project boundary. Proposed EIA study will cover project activities of 145 MW GEPP which will be acquired from project proponent.

2.4 EIA Study Components

The environmental studies on ambient air quality, noise, groundwater quality, surface water quality, soil quality, paddy field soil quality, sediment quality, aquatic biodiversity (planktons, benthos and fishes), terrestrial biodiversity (flora and fauna such as birds, mammal, reptile) and environmental geology will be conducted.

The surveys will cover the following environmental components:

• Physical Components including meteorology, topography, geological characteristics, soil quality, air quality, noise, groundwater quality, surface water quality, soil and sediment.

2.4.1 Water Environment Assessment:

According to IFC Guidelines for Thermal Power Plant, effluent from the proposed project shall comply with the following effluent guidelines: pH, TSS, Oil and Grease, Total Residual Chlorine, Chromium (Total), Copper, Iron, Zinc, Lead, Cadmium, Mercury, Arsenic, Temperature increase. Parameters of water that will be measured in assessment of surface water (3 samplings) and groundwater (2 sample) in EIA study are chosen as same parameters stated in IFC guideline nonetheless, for the monitoring purpose of drinking water during the phase of project life cycle, parameters stated in WHO guideline should be measured.

Sampling location of freshwater is very crucial in this project. Why? Possible waste water discharge from (i.e., effluent emission) from the project is flown toward downstream of Shan Gan channel together with irrigation water originated from Sun Ye Inn until it meets with the Zaw Gyi River and thereby, it continues its flow into the agricultural land as irrigation drainage network in southern part of the study area. From the perspective of pollution monitoring, it is important to understand the existing water quality before it leaves the project proposed.

2.4.2 Geological Environment

As the engine is driven by natural gas, deposit from flue gas emission would have unlikely to have impact on soil chemistry of neighboring paddy fields and bare soil, comparing with other fuel types such as biomass, coal, heavy fuel oil, etc. It is anticipated that oil spill from storage facilities, improper



handling in fuel transfer, and mechanical yard would have contamination in project soil only. Total number of soil sapling location for bare soil and sediment are three. The following 30 parameters will be analyzed in soil and sediment samples: LOI, Nitrogen, Phosphorus, Sulphate, Chloride, Arsenic, Mercury (if measurable in national lab), Lead, Chromium, Cadmium, Copper, Nickel, Zinc, Potassium, Manganese, Antimony, Silver, Moisture, pH (Soil water), EC, Texture. If soil test has already performed, bore hole results is requested.

2.4.3 Air and Noise Environmental Assessment

The surveys will focus on the data and information that are relevant and needed for the EIA. Possible significant impact induced through life cycle of Power Plant is degradation of ambient quality in its air shed. After taking anticipation of possible downwind receptors as per seasonal prevailing wind direction, measurement of air quality will be conducted at 2 locations (i.e., project site, residential area), continuously for 24 hours. In the airshed of project, Kein Na Ya taung is naturally formed concave-shaped-wind-breaking fence in winter, this may result air profile to be more stable relatively. Desk study showed that no residential area is observed in prevailing downwind direction of both winter and monsoon. Measurement of ambient sound level will be measured, coupling with air measurement but there is one more additional sampling point, all together 3 locations.

2.4.4 Biological Environment

Biological Components on aquatic ecology (in term of plankton, benthos, fish), and terrestrial biodiversity (in term of flora and fauna species in study area) will be studied to cover proposed project site, along the segment of Shan Gan channel and Zaw Gyi River and paddy field.

2.4.5 Socio-Economic and Public Health Assessment

Socio-Economic Components including socio-economic condition and perception on the proposed project, livelihood, utilization of irrigation water through Shan Gan and Zaw Gyi channel, , public health, and needs of community, in region of study (i.e., 3 km range of radius from project boundary). The social surveys will include collection of primary data as well as secondary data 2 times of stakeholder meetings (i.e., 1st and feedback meetings) at 1 location (Belin or other relevant location), where are the most likely to be affected by project activities, household surveys and Focus Group Discussion (FGD) to cover project area and vicinity. Public health survey is designed to conduct with household survey.



Quantitative Household Survey

Quantitative household survey that aims to generate a baseline description of pertinent demographic and socioeconomic characteristics of the project area will be carried out. Open-ended items that tap the community perceptions, attitudes, and opinions on the proposed project will also be formulated in the questionnaire.

2.4.6 Cultural Heritage Assessment

Environmental aspects of project activities have low possibilities to have impact on cultural issue except excavation activities at site. MSDES will include legal requirement for cultural heritage in the section of legal framework for proposed project and current EIA proposal does not consider cultural heritage assessment. If ECD requires cultural assessment in approval of scoping report, consultancy fee for cultural assessment can be submitted separately. However MSDES recommends project proponent to include this study component in ESIA study. Cultural Components includes existing places of cultural, historical, and religious importance.

2.5 Impact Assessment

Based on the updated project information and the surrounding environment, the Consultant will investigate all environmental and social impact issues identified for all project phases (Pre-Construction Phase, Construction Phase, Operation Phase, and Decommissioning Phase). MSDES would like to stress to the fact that identification of impact assessment for the decommissioning phase is likely to be general and relatively low accuracy because of the possible land use changes and presence of several uncertainties over long period.

2.6 Cumulative Impact Assessment

Possible air impact is considered as cumulative impact. The cumulative impact assessment will be examined by integrating studies of all components. Consultant need to consider impact assessment and provide mitigation measure with monitoring program.

2.7 Environmental Management Plan

The Consultant will prepare an EMP covering mitigation measures, monitoring and evaluation, and implementation arrangements for environmental management throughout the project development (pre-construction, construction, operation and decommissioning phases).

After evaluating the environmental impacts due to the proposed project, the other important portion is to prepare Environmental Management Plan (EMP). EMP is a site specific plan developed to ensure



that the project is implemented in an environmental sustainable manner where all contractors and subcontractors, including consultants, understand the potential environmental risks arising from the proposed project and take appropriate actions to properly manage that risk. EMP also ensures the project implementation is carried out in accordance with the design by taking appropriate mitigate actions to reduce adverse environmental impacts during its life cycle.

The key benefits of the EMP are that it provides the organization with means of managing its environmental performance thereby allowing it to contribute to improved environmental quality. The other benefits include cost control as improved relations to the stakeholders. Proposed project will include the following essential parts of EMP (Table 2).

No.	Description				
1.	Environmental Management Plan				
	(a) Mitigations Measures for Anticipated Environmental Impacts;				
	 Mitigation Measures for Pre-construction Phase 				
	 Mitigation Measures for Construction Phase 				
	 Mitigation Measures for Operation Phase 				
	 Mitigation Measures for Decommissioning Phase 				
	(b) Environmental Monitoring Program;				
	1. Environmental Monitoring Parameters and Responsibilities;				
	2. Proposed Monitoring Guidelines and Standards;				
	3. Proposed Environmental Management Cell;				
	4. Reporting of Monitoring Results;				
	(c) Cooperate Social Responsibility (CSR) Program;				
2.	Other Related Management Plan				
	1. Recommendation for Safe Working Practice;				
	2. Disaster Management Plan; and				
	3. Emergency Response Plan				

Table 2.	EMP	content
----------	-----	---------

2.8 Public Consultations and Disclosure

Consultations in the form of focus groups with possible stakeholders, community members, visitors and local INGOs or/and LNGOs and other interested organizations will be conducted to identify their needs, interests and expectations, and to assess their attitudes towards project and opinions about



potential impacts on physical environments, socioeconomic, community health and safety and cultural issue.

There will be two public consultation meetings during the process of EIA study.

- 1) Stakeholder meeting:
 - *Purpose:* Establishment of project transparency; to explain the role of MSDES and applied environmental practice including mitigation measure, compensation program and Corporate Social Responsibility (CSR); to inform project description, to explain possible impacts by project activities and study components; to identify project perception by local community and stakeholders; to record and incorporate concerns, suggestion, and vision in EIA scoping proposal which has to be submitted to MONREC; to collect information on community requirements and concerns for consideration of compensation program and CSR.
- 2) Feedback stakeholder meeting/presentation :
 - *Purpose:* To inform the result of studies, mitigation measure taken for potential impacts, to explain possible technical solutions for control of pollution and to inform limitation of current study; to discuss about applied compensation and CSR program which are included in EIA study report; to present follow up which is compliance with the report by key representatives of project developer; to receive suggestion, comments and opinion from stakeholders regarding with applied environmental study and proposed Hydropower projects

3 Content on EIA Report

The content on EIA report will followed to Environmental Impact Assessment Guideline, 2014 include:

Table of Content

List of Tables

List of Figures

List of Abbreviation

EXECUTIVE SUMMARY

PART 1: Legal Requirement; Standards and Codes; Project Information; EIA Methodology; Baseline Survey; Possible Impacts; Alternatives



- 1 ENVIRONMENTAL POLICY, LEGAL AND ADMINISTRATIVE FRAME WORK
- 2 BACKGROUND INFORMATION OF THE PROJECT
- **3** ENVIRONMENTAL SETTING AROUND THE PROJECT
- 4 APPROACH STRATEGIES OR APPLIED METHODOLOGY
- 5 DESCRIPTION OF THE ENVIRONMENT; BSASELINE STUDY
- 6 ANTICIPATED ENVIRONMENTAL IMPACTS
- 7 ALTERNATIVE

PART 2: Socio-Economy, Health and Stakeholder Meeting

- 8 SOCIAL IMPACT ASSESSMENT
- 9 HEALTH IMPACT ASSESSMENT
- 10 PUBLIC CONSULTATION AND PARTICIPATION
- PART 3: Environmental and Social Management; Compensation and CSR; Special Chapter
- 11 ENVIRONMENTAL MANAGEMENT PLAN (EMP)
- **13 SPECIAL CHAPTER**
- 15 CORPORATE SOCIAL RESPONSIBILITY (CSR) PROGRAM
- 16 SUMMARY, RECOMMENDATION AND CONCLUSION

REFERENCES & Annex

4 Deliverable Report and Schedule (Table 3 & Appendix 2)

Table 3. Deliverable Report & EIA Implementation Schedule

Document	Schedule	Submission
Final draft	Due to the difficulty in field study during raining	3 copies after
ESIA report	season, preparation of scoping proposal will be	receiving final
	carried out together with initial public meetings	comment and
	immediate after contract date. Approximately	suggestion from
	preparation of scoping proposal will be 1 or 1.5	ECD.
	month.	
	Submission of final draft EIA report will be 4 or 5	
	months from completion date of field study if (1)	
	no delay by force of majeure, (2) no interferences	
	or disturbances with EIA activities, (3) in time	



delivery of project information by GPT and (4) not	
more than 2 months for lab analysis.	
 If any changes in report submission schedule, 	
MSDES will inform to Developer.	

Complete version of ESIA report will be prepared and revised by MSDES. Then, it will be submitted to the client.

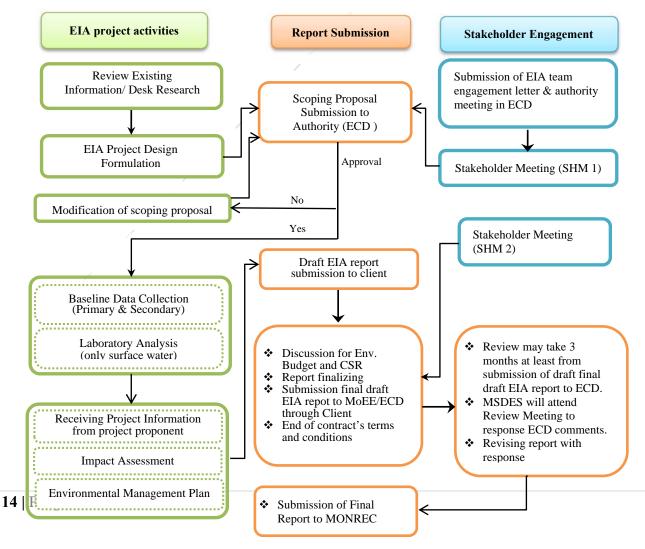
4.1 Terms and Condition/Remarks:

The following collaboration is requested from project developers, at least but not limited to;

- Current EIA sampling design and commercial proposal are prepared based on the information provided by project proponent and desk study which is not much accurate as result of field preliminary survey and it means that current EIA sampling design and commercial proposal (CP-MSDES-86/240618_EIA_Power Plant_GEPP_Belin) may vary.
- If there are additional studies required by ECD during the process of scoping approval and EIA review, which are beyond technical proposal of MSDES, additional consultancy fee to fulfill such requirements will be submitted.
- 3) MSDES will arrange ESIA team mobilization during the study period.
- 4) Commercial proposal does not include the accommodation and transportation expenditure for MSDES activities such as (1) more than 3 times of Nay Pyi Taw Trips for meeting with ECD and (2) environmental and social study outside of 3 km from project area.
- 5) During the field study, representative from project proponent team is requested to engage and assist the team MSDES.
- 6) Total number of MSDES staff who will engage in Nay Pyi Taw Trip will be 2~3 person and it is expected that number of ECD meeting is 3 times (i.e., authority meeting, initial Review Team meeting, 2nd Review Team meeting).
- 7) Although accomplishment of contract's terms and conditions end at submission of draft final EIA report to Client (Figure 3), MSDES will engage ECD review meetings with project proponent team to response the comments and suggestion from Review Team Committee and submit final report with response and modification. Client is required to submit it to MIC or relevant Ministry.



- 8) Information on project information (engineering design and other relevant project establishment and operation) is required to be delivered by project proponent before impact assessment which will be conducted immediate after completion of baseline field study.
- 9) Due to the necessity of effective response to the questions raised by stakeholders, key representative person who can make decision is strongly requested to attend public meetings.
- 10) Commitment letter for environmental and social management plan, CSR and legal requirement is the requirement of ECD and MSDES will request this letter at that time of report submittal.
- 11) Project budget associated with pollution control, implementation of environmental and social management plan will be requested to inform the public and authorities. Such information will be disclosed to the public and interested parties in the form EIA report.
- 12) Strong collaboration with project proponent is required for sustainable development. MSDES request representatives from project proponent team to assist and accompany MSDES field survey team during their studies.



5 Standard EIA Process of MSDES



Figure 3. Standard EIA process taken by MSDES

ECD = Environmental Conservation Department MONREC = Ministry of Natural Resources and Environmental Conservation MIC = Myanmar Investment Commission

Remark: Although accomplishment of contract's terms and conditions end at submission of draft final IEE report to Client, MSDES will engage ECD review meetings together with project proponent team to response the comments and suggestion from Review Team Committee and submission of final report with response and modification. Client is required to submit it to MIC or relevant Ministry

6 Consulting Firm Information

6.1 General Information

Consultant Name:	Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES)
	Services co., Etc. (INSDES)
Transitional Registration No.:	0032
Country of Incorporation:	Myanmar
Acronym:	MSDES
Representative:	Aung Nanda
Proposal authorized by:	Aung Nanda
Position:	Managing Director
Address:	No. 651, Airport Avenue Lane 1, Sawbwarkyi Gone,
	Insein Township, Yangon, Myanmar

MSDES, a formation of multi-disciplinary team, is designed to provide comprehensive engineering and management solution for urgent issues of our national requirement toward sustainable development; MSDES is committed to contribute our strength (knowledge and experience) in industrial development, rural area development and environmental conservation. MSDES's professional engineers and environmental scientists tackle problematic issues, arising from industrial development with the best practice engineering solutions based on scientific investigation results. MSDES was established in early 2012 with the vision of "MSDES cares for the developments that



meet current and future needs of our society". Since establishment, MSDES emphasize, to achieve sustainable development, on the following areas:

- Environmental, Socio-economic and Health Impact Assessment,
- Dam Impact Assessment/ River and Lake Ecology Assessment,
- Rural area development; transportation, energy, infrastructure,
- Environmental Monitoring.

MSDES is collaborating with its green network such as

- Myanmar Environment Institute (MEI) for capacity build up through research collaboration and knowledge upgrade,
- Sydro Consult GmbH (Germany) for dam breaking study
- Saitama University (Japan) for International Research Collaboration, Technical Transfer and Knowledge Upgrade.

MSDES is the first local consulting company who provides ESIA review consultancy service to Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation (MONREC) for Offshore Oil and Gas exploration and drilling Projects (AD-7 & A6); familiarity with IFC guidelines and depth understanding on those internationally-accepted-industrial practices were well developed through experiences as both ESIA practitioner and reviewer.

MSDES also has a proven record of accomplishment of ESIA project for the development 50 MW Gas Engine Power Plant which is located inside the compound of Ywama Power Plant and well understanding on environmental setting of subject project would help in project formulation and design in ESIA study.

The consultants from MSDES are well qualified in their relevant fields and most are lecturers, associate professors and professors at Universities. They offer many years of experience in comprehensive environmental and socio-economic study.

U Aung Nanda, Managing Director of MSDES, hold a master in Engineering and Environmental Science obtained at the Saitama University in Japan and bachelor degree in Electrical Power Engineering. He has 15 years of experience in environment studies.

His expertise covers cumulative and cross-sectors assessments integrating environment, engineering, water and waste management and stakeholder involvement. He is a member of Myanmar Engineering Society, Myanmar National Committee for Large Dam (MNCOLD) and co-founder of Myanmar Environment Institute (MEI).



MSDES is a registered third party firm (transitional registration no.: 0032, Appendix 1) of ECD who is licensed to conduct ESIA for the development projects. Furthermore, MSDES consultancy team member are certified registered specialist in their own study area (Table 4).

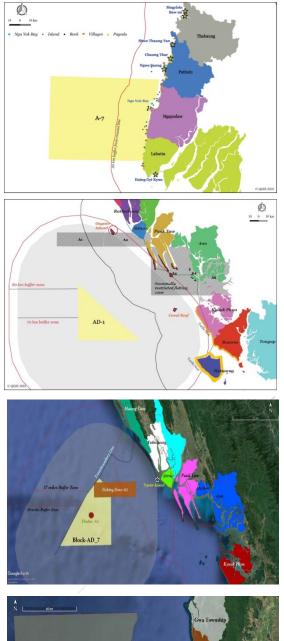
EIA study component		
Water Environment / EIA Project Design & Management	Aung Nanda	10112
Environmental Science and Engineering Management Plan/System (EMP/EMS)	Aung Nanda	10112
Noise Assessment	Aung Nanda	10112
Leal requirement	Chit Su San	10117
Air Quality Assessment	To be advised later	TBA
Ecology and Biodiversity	Prof. Dr. Myint Aung	10115
Socio-economic Impact Assessment (SIA)	Dr. Than Aung Htwe	10116
Social Management Plan & Corporate Social Responsibility	Dr. Than Aung Htwe	10116
Cultural Heritage Assessment (Optional)	Dr. Pyiet Phyo Kyaw	10114
Health Impact Assessment	Dr. Kyaw Maung Maung Hein	10118
GIS/RS	Htet Akar Soe	10113
Engineering Analysis	Win Myint (Retired Director of MOGE)	TBA
Safe Working Practice	MSDES	
Waste Management	Aung Nanda	
Study integration and Review	U Aung Nanda	
Project Management Team	MSDES	
Social Surveyor team	MSDES and Local Student	

Table 4 List of MSDES's Certified Consultants

Remark: Estimated total number of field members is 20. Team member of ESIA study may change based on project requirement and ESIA study design without prior notification.



6.2 Project Track Record- ESIA, Review Consultancy



ESIA review for A7 (February 2018-Ongoing)

Ministry of Natural Resources and Environmental Conservation (MONREC) appointed Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES) to provide consultancy service to review ESIA reports for deep water offshore drilling program of A-7 (joint venture of Woodside, BG Myanmar and MPEP) in Myanmar sea near Rhakkhine coast.

ESIA review for AD1 (February 2018-On going)

Ministry of Natural Resources and Environmental Conservation (MONREC) appointed Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES) to provide consultancy service to review ESIA reports for deep water offshore drilling program of A6 (joint venture of Woodside and CNPCI).

ESIA review for AD7 (November 2016-May 2017)

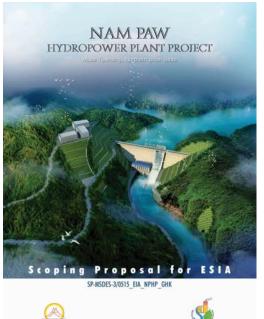
Ministry of Natural Resources and Environmental Conservation (MONREC) appointed MSDES to provide consultancy service to review ESIA reports for deep water offshore drilling program of AD-7 (joint venture of Woodside and POSCO Daewoo) in Myanmar sea near Rhakkhine coast.

ESIA review for A6 (November 2016-May 2017)

Ministry of Natural Resources and Environmental Conservation (MONREC) appointed MSDES to provide consultancy service to review ESIA reports for deep water offshore drilling program of A6 (joint venture of MPRL E&P Pte Ltd., Woodside Energy Myanmar Pte. Ltd. and Total E&P Myanmar).

Block -A6





m Public Co. Ltd

ESIA for 20 MW Nam Paw Hydro Power Project, Northern Shan State (December 2014-Ongoing)

Proposed project will fulfil the regional and national electrical requirement through connecting national grid. Feasibility study was conducted by Hunan Hydro & Power Design Institute, China and Myanmar Sustainable Development Engineering Services Company Limited (MSDES) took responsibility for Environmental, Socioeconomic and Health Impact Assessment. Dam breaking analysis was being conducted by SYDRO, Germany. MSDES had collaboration with Sydro in the process of Flood hazard map development such as engagement in stakeholder engagement (local authority and heads of village) and providing local information. Total number of MSDES team who involved in this study was 67 persons in total.

Scoping report was already approved by ECD. Baseline study was conduced spatially and temporally.



ESIA for 500 Ton/Day Integrated Rice Complex Project.in Twantay (December 2013-August 2015)

Environmental and Social Impact Assessment for sustainable development of 500 Ton/Day Integrated Rice Complex Project and reuse of rice husk as biomass or renewable energy for electricity production. Project proponent is Myanmar Japan Rice Industry (JV of Myanmar Agribusiness Public Corporation and Mitsui & Co., Ltd.). Distinct feature of this project is reuse of rice husk for power generation required for its own plant. Total number of MSDES team who involved in this study was 89 persons in total. Findings from ESIA study, National Emission Guidelines and MSDES's recommendation were taken into account as Input of environmental and social consideration to project design.





ESIA for 50 MW Gas Engine Power Plant (Ywama) (June 2013-November 2013)

Development of proposed gas engine power plant (50 MW) is private sector participation in Myanmar Electric Power Industry; Myan Shwe Pyi Limited contracted as turnkey contractor and UPP Power (Myanmar) Limited contracted as a project developer. Although there are existing Gas Turbine Power plants, within and in the vicinity of Yangon, such as Ywama, Taketa, Ahlone and Hlawga, there has been inadequate supply of electricity to suffice the peak load demand especially in the drought season. Fast track solution and low carbon electricity generation like development of Gas Engine Power Plant (GEPP) is considered for optimization of power supply and gap reduction between power demand and supply in order to alleviate power shortage in Yangon District.

6.3 Capability – Selected Project Experience

MSDES's relevant Experiences

Relevant project experience of the members of MSDES is shown in the table (5) below. The required experiences (listed in columns) have been derived from requirement of proposed project.

Table 5. Relevant 1 Toject E2	-p • · · • · · ·				
Project	Regional Experience	Power /Energy Sector	Gas fired Power Generation	ESIA review experience	Familiarity with IFC guidelines
ESIA for 50 MW Gas Engine Power Plant (Ywama), Location: Ywama Power Plant, Insein Towndhip, Yangon, Myanmar Client: UPP (Myanmar) Project Date: February 2013	\checkmark	\checkmark	\checkmark		\checkmark
ESIA for 20 MW Nam Paw Hydro Power Plant Location: Muse, Northern Shan State, Myanmar Client: Great Horkham Public Co. Ltd. Project Date: December 2014					\checkmark

Table 5. Relevant Project Experience



		1		1	
Nam Paw Hydro Power Project; collaborative study with					
Sydro Consult GmbH for Emergency Preparedness Plans,	1	,			1
stakeholder involvement, awareness-raising;					
Location: Muse, Northern Shan State, Myanmar					
Client: Great Horkham Public Co. Ltd.					
Project Date: December 2014					
ESIA Review for A7 & AD1 Offshore Drilling Program					
Location: Myanmar		1		1	1
Client: Environmental Conservation Department, Ministry		N			V
of Natural Resources and Environmental Conservation					
Project Date: January 2016-April 2017					
ESIA Review for A6 & AD7 Offshore Drilling Program					
Location: Myanmar		1		1	1
Client: Environmental Conservation Department, Ministry				$\sim $	
of Natural Resources and Environmental Conservation					
Project Date: November 2016-May 2017					
*Provision of EIA review consultancy service to review			/		
committee of MoECaF/MONREC for c.a 20 numbers of		/			
EIA reports in the following developments: energy sector		/			
(i.e., onshore oil and gas exploration, refinery plant,	/				
power generation by hydropower, coal fired power, natural					
gas, and solar power), industrial sector (i.e., beverage	•	•	•	•	•
production, acid plant), mining sector (i.e., purification,					
gold mining) and plantation and oil mill.					
Location: Myanmar					
Client: Knowledge Space					
Project Date: 2015 ~ 2016					
*Baseline study for the Development of 500MW CCGT Gas					
Turbine (Myanmar)					
Location: Thaketa, Myanmar	N	v	v		
Client: REM					
Project Date: 2012					
*Development of Yangon River Oil Spill Emergency					
Preparedness Plan	2				
Location: Yangon River	N				v
Client: Department of Maritime Administration					
Project Date: April 2016 ~ 14.2.2017					
Development of National Oil Spill Emergency					
Preparedness Plan	. /				. [
Location: Yangon River	N				N
Client: Department of Maritime Administration					
Project Date: 29 th March 2017 ~ present					
*Environmental Impact Assessment of Power					
Transmission Line (EIA PTL) Baluchaung-Shwe Myo &					
Upper Ye Ywa-Shwe Saryan, Myanmar	I	I			
Location: Baluchaung-Shwe Myo & Upper Ye Ywa-		\vee			
Shwe Saryan, Myanmar					
Client: Ministry of Electric Power					
Project Date: 2011					
110jour Duite, 2011		I	<u> </u>	I	



EIA 500Ton/day Integrated Rice Complex Plant,					
(Reuse of rice husk for power generation)					,
Location: Twantay, Yangon, Myanmar					
Client: Myanmar Japan Rice Industry (JV of MAPCO and					
Mistui & Co.Ltd.)					
Project Date: 2013~2015					
*Review of ESIA for Letpadaung Copper Mine;					,
Location: Monywa, Sagaing, Myanmar					
Client: Environmental Conservation Department					
Project Date:2013-2014					
*Rapid assessment of Letpadaung Copper Mine;	,				
Location: Monywa, Sagaing, Myanmar					
Client: Special Investigation Committee					
Project Date: December 2012~ February 2013			-	r	
*Engineering, Procurement and Consructionn of 33:11 kV					
substation	2	2	/		
Location: Hlaing Thet, Meikhtilar, Myanmar	N	N			
Client:					
Project Date: 2012		/			

Remark: Project name with asterisk (*) are individual engagement by Aung Nanda.

6.4 Key Personnel

Aung Nanda (Managing Director/MSDES team leader/Environmental Safeguard)

Transitional Registration No.: 10112

Aung Nanda is well experienced with the backgrounds of both Environmental Science and Human Engineering (Saitama University, Japan) and Engineering in Electrical Power (Yangon Technological University, Myanmar). His qualifications in both environmental studies and engineering fields provide valuable insight into the imperatives of project development and administration.

Along with the 15 years of his professional experiences (1998-present), he has been involved in a wide spectrum of environmental science and engineering in the following areas;

- Environmental Impact Assessment, Environmental Audit and Ecosystem Rehabilitation,
- Pollution Control and Waste Management,
- ✤ Aquatic Ecosystem Monitoring by using bio-indicators (i.e., aquatic insect),
- Risk Assessment, Site Inspections and
- Tendering, Project Management.

He has 8 years of research experience (2001-2009) in river, dam ecology and mangrove ecosystem and during his research period, he reported his scientific works in 5 international publications. Moreover, His 5 years Ph.D. work, ecological impact assessment of pre and post dam installation in



Takizawa, Chichibu Prefecture (2004-2009) is one of his core specializations in evaluation of watershed ecology due to anthropogenic factors.

In the sector of Industrial development, he provides optimum infrastructure design, developed from environmental engineering point of view, with Integrated Management Systems (IMS), skills and experience in order to help achieve the sustainable project development.

Apart from his management role, he remains active in research collaboration and investigations with Department of Environmental Science and Technology (Saitama University, Japan) on ecological assessment of Ayeyarwaddy River for water-basin management and headwater in Chin State and environmental conservation management. He is one of the founding members of Myanmar Environment Institute (MEI) and currently offering aquatic environment and water management courses.

Prof. Dr. Myint Aung (Biodiversity, Ecology and Flora) Transitional Registration No.: 10115

Flora expert Dr. MyintAunghas been working in the environmental consultancy industry for many years. He is a graduate of the University of Yangon where he was awarded an MSc in Tissue Culture. Dr. Myint Aung holds a doctorate degree of *Environment and Natural Science from Yokohama National University, Japan.*

His environmental project experience includes Environmental Impact Assessment on Flora of Htamanthi Hydro-power and Multipurpose Dam (2006), Assessment of species diversity & floristic composition of central dry zone forest emphasized on Powintaung Reserved Forest, Sagaing Division &Shinmataung Reserved Forest, Magway Division (2008), Environmental Baseline Study, Monitoring and Phytosociological Study on the Flora of MICCL S&K Project in Monywa (2008), Geochemical, Hydrological and Geobotanical Investigation in Mingon Area, Yangon Region and Meyon Area, Mon State, Wastewater Management of the Biopharmaceutical Plant in Hlegu Township, Yangon Region, Assessment of plant species diversity and plant community structure in Ywe-ngan Township, Southern Shan State, and Forest Dynamics Research of Endemic Species in the Tanintharyi Nature Reserve (2012).

He has done the particular researches on the Effect of growth factors on growth of Dendrobium Madam Udom Sri, In vitro Propagation and In vivo Blooming of Dendrobiummoschatum Swartz, Effects of Different Media and Growth Regulators on In vitro Culture and In vivo Blooming of



Rhynchostylisretusa (L.) Bl, and Physiological Study and Assessment of Bio-ethanol Productivity of Sorghum bicolor (L.) Moench (Sweet Sorghum).

Dr. Myint Aung's outstanding publications comprises Phytosociological study of mangrove vegetation in Byone-hmwe Island, Ayeyarwady Delta, Myanmar -Relationship between floristic composition and Habitat-; Mangrove Science, Japan. Vol. 3, 7-23, 04, Ecological study of mangrove vegetation in the Ayeyarwady Delta, Myanmar; ITTO, online article, 2004 (Japan), Assessment of species diversity & floristic composition of central dry zone forest emphasized on Powintaung Reserved Forest, Sagaing Division &Shinmataung Reserved Forest, Magway Division; ARC Project, Plant Species Diversity in Ywa-ngan Township, Southern Shan State; Universities Research Journal, Vol.2, 2009, Tree Species Diversity of Wet Dipterocarp Forest in the Taninthari Nature Reserved Forest, Taninthari Division; Dawei University Research Journal, Vol. II, and Forest structure, composition and diversity in Kyauk-shut area, Tanintharyi Nature Reserve (TNR); University of Yangon Research Journal Vol. 3, No.1.

Prof. Dr. Than Aung Htwe (Socio-economic Expert) Transitional Registration No.: 10116

Dr. Than Aung Htwe is an expert of socio-economic impact and he has an extensive knowledge and experience on the social related topics. His strong research and academics derived from his graduate degrees of Master of Science, Faculty of Psychology, GadjahMada University, Yogyakarta, Indonesia, and Master of Arts, Department of Psychology, Dagon University, Myanmar.

He has some distinguished publications such as Measurement of Adolescent Ego Identity: Myanmar Translation of Ego Identity Process Questionnaire, Journal of the Myanmar Academy of Arts and Science. Vol.X.No.10, Adaptation of the Big Five Personality Measures and Examination of Their Factor Structure, Journal of the Myanmar Academy of Arts and Science.Vol.IX.No.9, Investigation of Personality Traits in Relation to Career Satisfaction and Life Satisfaction. Pathein University Research Journal. Vol.2. No.1, and ARole of Psychosocial Factors on Career Anchors of Some Myanmar Workers. Universities Research Journal.Vo.2.No. 9.

Dr. Kyaw Maung Maung Hein (HIA)

Transitional Registration No.: 10118

Dr. Kyaw Maung Maung Hein graduated from University of Medicine 2 Yangon in 2012 and completed postgraduate diploma in EIA/EMS offered from Yangon Technological University (YTU) in 2014. He has experience of conducting survey and action plan on community health based on the



title of 'Smoking and community health' as a survey leader during his house surgeon period (2011). He has shown his keen interest in environmental conservation and community health promoting, He wish to participate in environmental conservation including social affairs and community health with his medical knowledge.

As one aspect of ESIA, health impact assessment (HIA) is also important and he is the most suitable person in HIA and SIA process because he has knowledge on both EIA/EMS and medical field and he can synchronize environmental affairs and health. Furthermore, subject on "Preventive and Social Medicine" is one of his core specializations. He is currently acting as one of the core members of Myanmar Sustainable Development Engineering Service (MSDES).

Htet Akar Soe (GIS/RS)

Transitional Registration No.: 10113

He gained his B.Sc (Forestry) from the University of Forestry and Environmental Studies (Yezin) since 2013, and also is one of the member of Myanmar Forest Association (MFA). Moreover, he got post graduate diploma in RS & GIS from the University of Yangon. As his first experience, he served as a plantation officer in Euclyptus pure plantation of Great Wall Group. After that, he started working in Environmental field works for over one year, cooperated with a local fund, Eguard Environmental Services Co., Ltd. In there, He got many experiences related with public consultation, and relevant environmental sectors. And then, He joined at Myanmar Sustainable Development Engineering Services Co., Ltd (MSDES) as an assistant environmental consultant. Recently at MSDES, he focused on many research studies such as noise impact assessment, traffic study, air emission, aquatic ecosystem, and especially on remote sensing & GIS studies. He had registered as an RS & GIS consultant at Environmental Conservation Department (ECD). His published research term papers are Land Use Changes and Development of Myanmar and Geospatial spatial application for flood inundated mapping of Chindwin and Ayeyarwaddy River within dry zone area of central Myanmar.

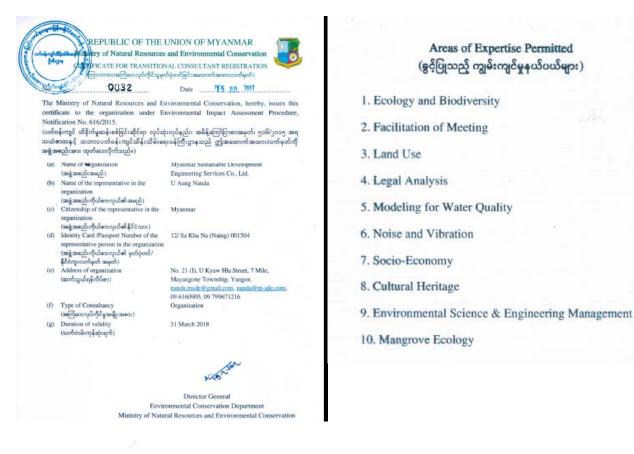
Chit Hsu San (Legal Analyst) Transitional Registration No.: 10117

Her academic degree is a Master of Law (LL.M) and Master of research (Mres) graduated from Yangon University. During her master study, she did comprehensive research on "Woman Rights in Myanmar". Currently she is taking doctoral course in the University of Yangon. She started willingness to join environmental sector after completing Master degree, and worked as a legal consultant in Myanmar Sustainable Development Engineering Services Co., Ltd. In that organization,



legal analysis was her special interest or subject. During previous years, she had accumulated legal work experiences through ESIA process. Her significant project consultation or participation was legal requirement in the EIA study for Nam Paw Hydropower Project in Muse at Northerm Shan State. Also, she got legal consultant registration from Environmental Conservation Department (ECD), (Registration. 10117).

Appendix 1





Appendix 2

Project Schedule for 145 MW

		August	September	October	Novem	ber		Decem	ber	14	inuary		mille.	
	Start Tue Jul 17	Add tasks with dates to the timeline				neline						Finish Thu Jan 24		
	Task Mode •	Task Name			Duration	Qtr 3, Jul		lug	Sep	Qtr 4, 201 Oct	8 Nov	Dec	Qtr 1, 2 Jan	019 F
1	10	Scoping Proposal Subm	ission to Authority (EC	(D)	29 days	1		1						
2	*	Desk Study			5 days									
3	*	ELA Project Design Fo	ormulation		3 days									
4	*	Submission of EIA Te meeting in ECD	am engagement lette	r & authority	3 days									
5	*	Stakeholder Meeting	g (SHM 1)		5 days									
6	*	Preparation and Sum	nmation of Scoping Pro	posal	15 days		-							
7	-	Draft EIA report submis	sion to client		84 days			-				-		
8	*	Baseline Data Collec	tion (Primary & Secon	dary)	15 days			1						
9	*	Laboratory Analysis			60 days									
10	*	Receiving Project Inf	formation from project	t proponent	3 days									
11	*	Impact Assessment &	& Environmental Mana	igement Plan	45 days									
12	-	Proof reading and discu	ussion for EMP budget	and CSR	7 days									
13	1 5	Submission final draft I	EIA report to MoEE/EC	D through Client	22 days									
14	*	Stakeholder Meeting	g (SHM 2)		7 days									
15	*	Report Finalizing			15 days									
16	*	End of Contract's ter	ms and conditions		0 days								٠	1/20



Appendix 3 Curriculum Vitae

- Environmental Science and Engineering Management Consultant **Proposed Position:** 1
- 2 Name of Firm: Myanmar Sustainable Development Engineering Services Company Limited
- Name of Staff: Mr. Aung Nanda 3 16.02.1973
- Date of Birth: 4

Nationality: Myanmar

5 **Education:**

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:		
Yangon Technological University,			
Yangon, Myanmar,	Bachelor of Engineering (Electrical Power)		
(1993 ~1998)			
SAITAMA University, Japan,	Master of Engineering		
2002 - 2014	(Environmental Science & Human Engineering)		

6 **Membership of Professional Bodies:**

- Certified Environmental Key Consultant (transitional registration No.: 10112)
- Chairman of Myanmar Environmental Assessment Association
- Member of Myanmar Engineering Society (MES)
- Member of Myanmar National Committee for Large Dam (MNCOLD)

Countries of Work Experience: 7

- Myanmar; Managing director, ESIA reviewer and ESIA specialist (2012~present) *
- Myanmar; Project Manager (2010~2012) *
- Japan: Engineer (2009) to supply product in green business *

8 Languages:

Language	Reading	Writing			
Burmese	Mother Tongue				
English	Intermediate	Intermediate	Intermediate		
Japan	Fair	Intermediate	Intermediate		

9 **Employment Record:**

From: 2012 To: present

Employer: Myanmar Sustainable Development Engineering Services Co., Ltd., Positions held: Managing Director

From: 2016 To: Present Employer: Ministry of Natural Resources and Environmental Conservation (MONREC)

Positions held: External EIA Review Consultant for Energy Sector

Myanmar Sustainable Development Engineering Services Co., Ltd.



From: 2015 To: 2016 Employer: Knowledge Space Positions held: External EIA Review Consultant for MOECAF

From:2013To:2014Employer:Ministry of Environmental Conservation and Forestry (MOECAF)Positions held:External EIA review Consultant for Let Pa Daung Copper Mining

From:2013To:2013Employer:Special Investigation Committee for Let Pa Daung Copper MiningPositions held:Environmental Science and Engineering Consultant

From: 2010 To: Present Employer: Myanmar Environmental Institute, Myanmar Positions held:Lecturer & Founding Member

From: 2011 To: 2012 Employer: Freelance Environmental Consultant in ESIA study Positions held:Key Consultant

From: 2010 To: 2012 Employer: Gunkul Engineering Supply Co., Ltd., Myanmar Positions held:Project Manager

From: 2009 To: 2009 Employer: Sayama Seisakusho Co., Ltd., Japan Positions held: Product Marketing Engineer

From: 2007 To: 2008 Employer: Department of Environmental Science & Technology, SAITAMA University, Japan Positions held: Research Assistant

From:2006To:2007Employer:United Nations University Institute of Advanced Studies, Yokohama,

Myanmar Sustainable Development Engineering Services Co., Ltd.



Japan Positions held: Assistant System Administrator

From: 2001 To: 2001 Employer: Gunkul Engineering Supply Co., Ltd., Myanmar Positions held: Sales & Service Engineer

From:1998To:2001Employer:No.1 Elevators and Escalators Services, MyanmarPositions held:Assistant Electrical Engineer

10 Detailed Tasks Assigned

Key qualifications:

- 7 years of research experience in aquatic ecology (River, Lake & Dam)
- 15 years of experience in Environmental studies
- Familarity with IFC guidelines and ESIA review technology
- Depth understanding of Environmental Science and Engineering Management

11 Projects Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

12

Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for 18 MW Hydropower Project, Muse, Myanmar

Year: 2015 ~ present

Location: Muse Township, Northern Shan State, Myanmar

Client: Great Hor Kham Public Co Ltd.

Positions held: Team Leader/ Environmental and Social Safeguard

Main project features: Proposed project will fulfil the regional and national electrical requirement through connecting national grid. Feasibility study was conducted by Hunan Hydro & Power Design Institute, China and Myanmar Sustainable Development Engineering Services Company Limited (MSDES) took responsibility for Environmental, Socio-economic and Health Impact Assessment. Dam breaking analysis was being conducted by SYDRO, Germany. MSDES had collaboration with Sydro in the process of Flood hazard map development such as engagement in stakeholder engagement (local authority and heads of village) and providing local information.



Activities performed:

- ESIA project formulation and Design; screening potential impact from project activities
- Field survey and investigation in aquatic ecological study, taking leading role in Public Stakeholder Meeting to promote project transparency
- Input of local concerns and suggestion/comments into designed-ESIA framework
- Input of ESIA knowledge into the study of sector-wise social questionnaire survey and supporting field surveyor team to achieve fine resolution of result from SIA study
- Integration of results and findings from each study components; exchanges of key findings between study teams to promote the efficiency of study design
- Writing clear and comprehensive recommendation for decision making bodies (Authority)
- Environmental consideration to mitigate disaster and climate risk
- Providing environmental management solutions to mitigate adverse effect from Nam Paw dam installation; conducting research activities and collaboration with international institution
- Providing best technical solutions, Closely engagement with authorities for verification of requirements; acquisition of guidelines from concerned authority and presenting status of project and outcomes

Name of assignment or project: ESIA Review for A6 & AD7 Offshore Drilling Program

Year: November 2016~ May 2017

Location: Myanmar Marine near Rakkhine Coastal line Client: Ministry of Natural Resources and Environmental Conservation (MONREC)

Positions held: Team leader of external ESIA Reviewer/ Environmental and Social Safeguard

Main project features: Ministry of Natural Resources and Environmental Conservation (MONREC) appointed Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES) to provide consultancy service to review two ESIA reports for deep water offshore drilling program of A6 (joint venture of MPRL E&P Pte Ltd. and Woodside Energy Myanmar Pte. Ltd. and Total E&P Myanmar) and AD-7 (joint venture of Woodside and POSCO Daewoo) in Myanmar sea near Rhakkhine coast.

Activities performed:

• Compliance check of proposed EIA reports with National environmental law, rules,



EIA procedure, and IFC requirement Clarification and verification of technical matters,

- ESIA design adequacy check and identification of potential impacts on surrounding environment; request of supplementary information
- Suggestion and recommendation for disaster and climate risk management
- Suggestion and recommendation, especially for EMP section and emergency response plans (e.g., blowout prevention plan, oil spill response plan, waste management etc.)
- Engagement in EIA review meetings in Nay Pyi Taw

Name of assignment or project: Development of National Oil Spill Contingency Plan

Year: 29th March 2017 ~ present

Location: Yangon

Client: Department of Marine Administration (DMA), Myanmar

Positions held: Environmental Consultant

Main project features: DMA is initiating to develop National Oil Spill Contingency Plan.

Activities performed:

- Input of environmental and social consideration in development of National Oil Spill Contingency Plan
- Study of Oil Spill Response Plan at private, municipal and national level in Norway (12.6.2017 ~ 17.6.2017)
- Visit to stockpile depot in Horten and Ministry of Transport and Communications, Norway

Name of assignment or project: Development of National Oil Spill Contingency Plan and Yangon River Oil Spill Contingency Plan (YOSCP)

Year: April 2016 ~ 14.2.2017

Location: Yangon

Client: Department of Marine Administration (DMA), Myanmar

Positions held: Environmental Consultant

Main project features: DMA is initiating to develop National Oil Spill Contingency Plan and Yangon River Oil Spill Contingency Plan (YOSCP).

Activities performed:

- Input of environmental and social consideration in development of Yangon River Oil Spill
 Contingency Plan
- Development of base map (draft) and guideline (draft) for sensitivity map



 Participation in table –top exercise on Yangon River Oil Spill Contingency Plan (YOSCP) (4~5 May 2017)

Name of assignment or project: ESIA review for Development projects in Myanmar

Year: 2015 ~ 2016

Location: Yangon

Client: Knowledge Space

Positions held: ESIA reviewer

Main project features: Provision of consultancy service to review committee of MoECaF/MONREC to review ESIA reports for energy sector (i.e., Hydropower, coal fired power, natural gas, solar power, oil and gas exploration, refinery plant), industrial sector (i.e., beverage production, acid plant), mining sector (i.e., purification, gold mining) and plantation and oil mill.

Activities performed:

- Compliance check of proposed EIA reports with National environmental law, rules, EIA procedure, and IFC requirement; Clarification and verification of technical matters,
- ESIA design adequacy check and identification of potential impacts on surrounding environment; request of supplementary information
- Suggestion and recommendation, especially for EMP section and emergency response plans
- Engagement in EIA review meetings in Nay Pyi Taw

Name of assignment or project: EIA 500Ton/day Integrated Rice Complex Plant

Year: 2013~2015

Location: Twantay Townsihip, Yangon, Myanmar

Client: Myanmar Japan Rice Industry (JV of Myanmar Agribusiness Public Corporation and Mitsui & Co., Ltd.)

Positions held: Project Team Leader/consultants for water environment/ Environmental Management Plan

Main project features: Environmental and Social Impact Assessment for sustainable development of 500 Ton/Day Integrated Rice Complex Project and reuse of rice husk as biomass or renewable energy for electricity production.

Activities performed:



- ESIA project formulation and Design; screening potential impact from project activities
- Field survey and investigation for ambient water quality assessment, taking leading role in Public Stakeholder Meeting to promote project transparency
- Input of local concerns and suggestion/comments into designed-ESIA framework
- Input of ESIA knowledge into the study of environmental component and supporting field surveyor team to achieve fine resolution of result from SIA study
- Integration of results and findings from each study components; exchanges of key findings between study teams to promote the efficiency of study design
- Writing clear and comprehensive recommendation for decision making bodies (Authority)
- Providing environmental management solutions to mitigate adverse effect ; conducting research activities
- Providing best technical solutions, Closely engagement with authorities for verification of requirements; acquisition of guidelines from concerned authority and presenting status of project and outcomes
- Solid waste management (Rice Husk Ash)
- Traffic volume survey
- Changes in Hydrological regime and flood risk
- Environmental consideration to mitigate disaster and climate risk

Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for 50 MW Gas Engine Power Plant, Yangon

Year: 2013

Location: Ywama, Insein Townsihip, Yangon, Myanmar

Client: UPP Power (Myanmar)

Positions held: Project Team Leader/ Environmental and Social Safeguard

Main project features: Development of proposed gas engine power plant (50 MW) is private sector participation in Myanmar Electric Power Industry; Myan Shwe Pyi Limited contracted as turnkey contractor and UPP Power (Myanmar) Limited contracted as a project developer. Predicted power demand in year 2013-2014 is 800MW~900 MW. Although there are existing Gas Turbine Power plants, within and in the vicinity of Yangon, such as Ywama, Taketa, Ahlone and Hlawga, there has been inadequate supply of electricity to suffice the peak load demand especially in the drought season.



Fast track solution and low carbon electricity generation like development of Gas Engine Power Plant (GEPP) is considered for optimization of power supply and gap reduction between power demand and supply in order to alleviate power shortage in Yangon District.

Activities performed:

- ESIA project formulation and Design; screening potential impact from project activities
- taking leading role in Public Stakeholder Meeting to promote project transparency
- Input of local concerns and suggestion/comments into designed-ESIA framework
- Input of ESIA knowledge into the study of environmental component
- Integration of results and findings from each study components; exchanges of key findings between study teams to promote the efficiency of study design
- Writing clear and comprehensive recommendation for decision making bodies (Authority)
- Conducting research activities
- Providing best technical solutions, Closely engagement with authorities for verification of requirements; acquisition of guidelines from concerned authority and presenting status of project and outcomes
- Solid waste management

Name of assignment or project: Review on ESIA Letpadaung Copper Mining

Year: 2013~ 2014

Location: Monywa, Sagaing Myanmar

Client: : Ministry of Environmental Conservation and Forestry (MoECaF)

Positions held: External EIA reviewer

Main project features: Letpadaung Copper Mine is a national level Copper Mining Project and regarded as second biggest copper ore mining in Asia. This project is under the joint venture of Myanmar Wanbao Mining Copper Ltd., Ministry of Mining (Myanmar) and UMEHL. ESIA report for Letpadaung Copper Mining was prepared by *Knight* Piésold Consulting Firm and MoECaF assigned external consultants to strengthen the technical knowledge in review process of proposed EIA report.

Activities performed:

 Compliance check of proposed EIA reports with National environmental law, rules, and IFC requirement



- ESIA design adequacy check and identification of potential impacts on surrounding environment; request of supplementary information
- Engagement in EIA review meetings (20 times) in Nay Pyi Taw
- Clarification and verification of technical matters, especially in design of waste facilities, stockpile, water use, waste water treatment and field investigation result
- Earthquake risk and natural flood risk assessment
- Suggestion and recommendation, especially for EMP section and emergency response plans including disaster and climate risk management

Name of assignment or project: Rapid assessment of Letpadaung Copper Mine; Investigation on environmental performance and compliance with international standards based on Environmental Science and Engineering point of view

Year: December 2012~ February 2013

Location: Monywa, Sagaing Myanmar Client: Special Investigation Committee

Positions held: Key consultant for Environmental Science and Engineering

Main project features: Letpadaung Copper Mine is a national level Copper Mining Project and regarded as second biggest copper ore mining in Asia. This project is under the joint venture of Myanmar Wanbao Mining Copper Ltd., Ministry of Mining (Myanmar) and UMEHL. Due to the project requirement, special investigation committed was set up and rapid assessment report was urgently required for decision making process. Technical report was published in National News Papers.

Activities performed:

- Field investigation and environmental auditing
- Identification of environmental problem associated with project design; risk assessment on mine design
- Identification of possible leakage of pregnant solution
- Identification of flood risk exposure to waste water pond
- Provision of international practice into existing management plan
- Environmental consideration in disaster and climate risk managment
- Reporting findings, recommendation and suggestion to Special investigation committee

Name of assignment or project: Baseline study for the Development of 500MW CCGT Gas Turbine (Myanmar)

Year: 2011

Location: Taketa, Yangon, Myanmar



Client: REM

Positions held: Consultant for water environment

Main project features: Participation as freelance environmentalist

Activities performed: Field survey and report writing for water quality

Name of assignment or project: Initial Environmental Evaluation for Moehti Gold Mining)

Year: 2012

Location: Yamethin, Myanmar

Client: REM

Positions held: Consultant for waste management

Main project features: Participation as freelance environmentalist.

Activities performed: Field survey and report writing for waste management

Name of assignment or project: Environmental study for Power Transmission Line (EIA PTL)

Year: 2011

Location: Baluchaung-Shwe Myo & Upper Ye Ywa-Shwe Saryan, Myanmar Client: Ministry of Electric Power (MOEP)

Positions held: Project Manager of Gunkul Engineering Supply Co., Ltd. /Consultant **Main project features:** Ministry of Electric Power (MOEP) outsourced ESIA consultancy service to Gunkul Engineering Supply Co., Ltd for the construction of subject transmission lines. Resource and Environment Myanmar (REM) was subcontractor..

Activities performed:

- Project Management
- Field survey and report writing for waste management & identification of impacts induced by engineering process

Name of assignment or project: , Hlaing Thet 33:11 kV substation

Year: 2010~2012

Location: Nay Pyi Taw and Yangon, Myanmar

Client:

Positions held: Project Manager of Zeya & Associates (formerly known as Gunkul Engineering Supply Co., Ltd.)

Main project features: .

Activities performed:



- Engineering, Procurement and Construction of 33:11 kV substation, Hlaing Thet, Meikhtilar
- Supply of electrical equipment and oil and gas products; engineering assistance in trouble shooting; market development and extension; supervision sales team
- Tendering process such as outsourcing, technical clarification, documentation, site visit

Name of assignment or project: Environmental assessment by using bio-indicator (aquatic insect) under pre and post Takizawa dam

Year: 2005 to 2009

Location: Chichibu City, JAPAN

Client:

Positions held: PhD candidate

Main project features: This research was performed for partial fulfilment of PhD course. (Note: PhD was not completed yet.)

Activities performed:

- Study of aquatic insect responses to the changes of food-sources under pre and post dam installation
- Field sampling, Identification of aquatic insect and their functional feeding group
- Lab measurement for Chlorophyll a, water nutrient, Food sources for aquatic ecosystem (CPOM and FPOM ,)
- Data analysis using Canoco vesion (4.5)

Name of assignment or project: Research assistant program for ecological lab, Saitama University

Year: 2008

Location: Saitama University, Japan

Client:

Positions held: Research Assistant

Main project features: This program was to provide research assistance under supervision of Assoc. Professor.

Activities performed:

- Water quality analysis; identification of aquatic insects, data processing and analysis
- Phytoplankton distribution study in Okutama dam



Name of assignment or project: Influences of water chemistry and stream biota on the decomposition experiments of Zelkova serrata leaves and Prunus Lannesiana leaves in Yanase River, Iruma City Year: 2004 to 2004 Location: Japan **Client:** Positions held: Researcher Main project features: This research was performed as partial fulfilment of Master degree course. Activities performed: Study on influences of water chemistry and stream biota on the decomposition experiments of Zelkova serrata leaves and Prunus Lannesiana leaves in Yanase River, Iruma City, JAPAN. Impact of stream geomorphic units on leaves litter (CPOM) retention; Application of • integrated surveying methodologies (i.e., stream-geomorphology mapping, map producing, map-digitizing, map updating) to elucidate the characteristics of stream geomorphic units and its enhancement on leaves litter (CPOM) distribution. **Publications:** 1) Nanda A., T. Asaeda, T. Fujino & T. Nakajima, 2009. Aggregation of lepidostomatidae in small

- Nanda A., T. Asaeda, T. Fujino & T. Nakajima, 2009. Aggregation of lepidostomatidae in small mesh size litter-bags: implication to the leaf litter decomposition process. Journal of Wetlands Ecological Management 17-4: 417-421.
- 2) Takashi Nakajima, Takashi Asaeda, Takeshi Fujino & **Aung Nanda**, 2006. Leaf Litter Decomposition in Aquatic and Terrestrial Realms of a Second-Order Forested Stream System. Freshwater Ecology 21-2: 259-263.
- 3) Takashi Nakajima, Takashi Asaeda, Takeshi Fujino & **Aung Nanda**, 2006. Coarse particulate organic matter distribution in the pools and riffles of a second-order stream. Hydrobiologia 559: 275-283.
- 4) T. Fujino, H. Wityi & A. Nanda 2012 Aquatic Invertebrate Monitoring at the Least Developed Areas in Myanmar effect of shifting cultivation on water quality, ISRS 2012 conference
- 5) Takashi NAKAJIMA, Takashi ASAEDA, Takeshi FUJINO & Aung NANDA, 2007. Leaf pack distribution and accumulation mechanism in a second-order stream. Ecol. Civil Eng 10(2): 131-139
- 6) NANDA, Aung, Takashi FUJINO, Takeshi ASAEDA, Yoichi TAKAHASHI, 2006. High population of invertebrate in upstream. 日本陸水学会,(1B03).
- 7) NANDA, Aung, Takashi FUJINO, Takeshi ASAEDA, Yoichi TAKAHASHI, 2006. Proceedings of the International Conference on Ecological Restoration in East Asia 2006, Osaka. Poster session. Macro-invertebrate community composition in upstream and downstream of Takizawa Dam.

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Proceedings of the International Conference on Ecological Restoration in East Asia 2006, Osaka. (Poster session.)

- 8) T.Fujino, T.Asaeda, T.Nakajima, Aung Nanda, 2005. Organic matter retention and its distribution in low discharge stream. Poster presentation of ASLO 2005 Summer Meeting in Santiago de Compostela, Spain, 19-24. (Poster session.)
- 9) T.Fujino, T.Nakajima, **Aung Nanda**, T. Asaeda, 2003. Leaf Litter breakdown in upstream ecosystems. Proceeding of the Seminar on Civil and Environmental Engineering in **Bangkok**, **Thailand**, 18-19.
- 10) Nanda, Aung, Takashi Nakajima, Takeshi Fujino, Takashi Asaeda, 2003. Leaf litter decomposition by mesh bag method and its problem. 68th Japanese Limnology Symposium in Okayama, Pg.174. (Poster session.)
- 11) Win Maung, Soe Thura Tun, Zaw Naing Oo and Aung Nanda (2011) Physical and Biological Characteristics of Kandawgyi and Inya Lakes in Yangon Mega-City
- 12) Nanda, A., et. al, "Initial report on rapid assessment of Yangon Air Quality affected by fly-ash-particulate matter (PM10 and PM2.5) in smoke dispersion from fire of Htein Pin waste dumpsite", Project No.: MIAA-01/0518_Htein Pin Fire, (2018).

14 Certification:

- a. ABS ISO 14001:2015 EMS Internal Auditor Certificate
- b. "Environmental Safeguard Policy Application "arranged by MONREC, ADB, WB (March 28-29, 2017)
- c. "Training on Air Quality Management" arranged by YCDC, AIT (Thailand) & EQM (12-13 February 2017)
- d. Dam Safety arranged by Irrigation Department, Myanmar (2016)
- e. Introduction for Air Quality Study arranged by EQM
- f. Professional Development Program in Myanmar Engineering Council (15 hours)
- g. Introduction for ISO: 14001
- h. ISO: 9001 Internal Auditor Course

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Date: <u>15 December 2017</u>

Full name of authorized representative: ____Aung Nanda

Myanmar Sustainable Development Engineering Services Co., Ltd.





Curriculum Vitae

- 1 **Proposed Position:** Biodiversity Consultant
- 2 Name of Firm: Myanmar Sustainable Development Engineering Services Company Limited
- 3 Name of Staff: Prof. Dr. Myint Aung
- **4 Date of Birth:** 15.06.1967

Nationality: Myanmar

5 Education:

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
University of Yangon, 1991	B.A (Honours) (Botany)
University of Yangon, 1995	MSc. (Tissue Culture)
Yokohama National University, Japan, 2004	Ph.D (Environment and Natural Science)

6 Membership of Professional Bodies:

- a. Certified Biodiversity Key Consultant (transitional registration No.: 10115)
- 7 Countries of Work Experience:

Myanmar, Japan

8 Languages:

Language	Reading	Writing			
Burmese	Mother Tongue				
English	Excellent Excellent Exceller				
Japan	Intermediate	Intermediate	Intermediate		

9 Employment Record:

From:1994To:2001Employer:University of YangonPositions held:Demonstrator

From:2001To:2004Employer:University of YangonPositions held:Assistant Lecturer

From:2004To:2009Employer:University of Yangon and Dawei UniversityPositions held:Lecturer

From:2009To:2015Employer:Dawei University and University of YangonPositions held:Associate Professor

From: 2015 To: till now Employer: University of Myitkyina



Positions held: Professor

10 Detailed Tasks Assigned

Key qualifications:

• PhD, Vegetation Science

11 Projec	ts Undertaken that Best Illustrates Capability to Handle the Tasks Assigned			
12				
Name of assig	nment or project: ESIA Review for A6 & AD7 Offshore Drilling Program			
Year: 2016~ 2	4.11.2017			
Location: Mya	anmar Marine near Rakkhine Coastal line			
Client: Ministr	ry of Natural Resources and Environmental Conservation (MONREC)			
Positions held	: Mangrove specialist			
Main project f	eatures: Ministry of Natural Resources and Environmental Conservation (MONREC)			
appointed Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES) to provide				
consultancy service to review two ESIA reports for deep water offshore drilling program of A6 (joint				
venture of MPRL E&P Pte Ltd. and Woodside Energy Myanmar Pte. Ltd. and Total E&P Myanmar) and AD-				
7 (joint ventur	e of Woodside and POSCO Daewoo) in Myanmar sea near Rhakkhine coast.			
Activities perf	ormed:			
• Compl	iance check of proposed EIA reports with National environmental law, rules, EIA			
-	dure, and IFC requirement Clarification and verification of technical matters,			
	esign adequacy check and identification of potential impacts on surrounding environment;			
	st of supplementary information			
	stion and recommendation for coastal biodiveristy study			
	ignment or project: Environmental and Social Impact Assessment (ESIA) for 18 MW			
Hydropower P	roject,			
Year: 2015 to	ongoing			
Location: Mus	e, Shan state, Myanmar			
Client: Great	Hor Kham Co Ltd.			
Positions held	: Biodiversity Consultant			
Main project f	eatures: ESIA			
Activities perf	ormed:			
 Engage 	ement in ESIA project formulation and design			
	ersity research design, field survey and report writing including mitigation measure			
	gnment or project: Environmental and Social Impact Assessment (ESIA) for 500 Ton/Day			
	e Complex Project			
Year: 2014 to 2				
Location: Mya				
•	nar Agribusiness Public Corporation			
	: Biodiversity Consultant			
Main project f	•			
Activities perf				
-	ement in ESIA project formulation and design			
	ersity research design, field survey and report writing including mitigation measure			
	tions and Research Activities:			
	Forest Dynamics Research of Endemic Species in the Tanintharyi Nature Reserve (2012)			
-7	,			



- 2) Phytosociological study for conservation and restoration of mangrove vegetation in the the Ayeyarwady Delta, Myanmar (2004)
- 3) Effect of growth factors on growth of *Dendrobium* Madam Udom Sri (1995)
- 4) Altitudinal Effect on Species Diversity and Floristic Composition of Evergreen Forest in Kachin State (Supervisor)
- 5) Geochemical, Hydrological and Geobotanical Investigation in Mingon Area, Yangon Region and Meyon Area, Mon State (Supervisor)
- 6) Economically Important Pulses in Kanma and Myitchay Areas, Western Pakokku Township (Member)
- 7) In vitro Propagation and In vivo Blooming of Dendrobium moschatum Swartz. (Member)
- 8) Economically Important Pulses in Kanma and Myitchay Areas, Western Pakokku Township (Member)
- 9) Effects of Different Media and Growth Regulators on In vitro Culture and In vivo Blooming of Rhynchostylis retusa (L.) Bl. (Member)
- 10) Flower Production of *Bulbophyllum auricomum* L. Through the Application of Plant Growth Regulators and Its Micropropagation (Member)
- 11) Phytosociological study of Dry Zone Forest in Shinmataung Reserved Forest, Yesagyo Township, Magway Region (Supervisor)
- 12) Phytosociological Study of Dry Zone Forest in Powin Taung Reserved Forest, Monywa District, Sagaing Region (Supervisor)
- 13) Wastewater Management of the Biopharmaceutical Plant in Hlegu Township, Yangon Region (External examiner)
- 14) Species composition and structure of mangrove community along the U-To tidal creek in Chaung Tha (External examiner)
- 15) Assessment of plant species diversity and plant community structure in Pauk Township, Magway Region (External examiner)
- 16) Physiological Study and Assessment of Bio-ethanol Productivity of Sorghum bicolor (L.) Moench(Sweet Sorghum)(Member)
- 17) Assessment of Water Quality in Inle Lake, Southern Shan State (Supervisor)
- 18) Assessment of plant species diversity and plant community structure in Ywe-ngan Township, Southern Shan State (Supervisor)
- 19) Ecology of mangrove forest in the coastal zone of Mon State with special reference to the family Sonneratiaceae (External examiner)



- 20) A phytosociological study of vegetation on Kelatha Mountain, Bilin Township, Mon State (Supervisor)
- 21) Ggeobotanic study on plant community and accumulation of trace elements in plants and soils with special reference to Khwayaiktaung, Heho, Southern Shan State (Supervisor)
- 22) Ggeobotanical analysis on the associated plant species and relationship of plants and rocks and mineralization in Taungni Taung Area, Kyaukpadaung Township, Mandalay Division (Supervisor)
- 23) The study on the protease enzymes extracted from pineapple paints (Co-supervisor)
- 24) Fern flora and communities in the Yangon Division (Co-supervisor)
- 25) Ggeobotanical analysis on the associated plant species and relationship to rocks and mineralization at Kyaukmyet area, Salingyi Township, Sagaing Division (Supervisor)
- 26) A study on ethnomedicinal plants used by Kayin tribes in Thandaungyi Township (External examiner)
- 27) Diversity of plant species in Letpadaung hills and their socio-economic status in five selected villages located in the vicinities (Co-supervisor)
- 28) Phytosociological study of mangrove vegetation in the Laung-lone Township, Tanintharyi Region (M.Res., Supervisor)
- 29) Mangrove species composition and floristic diversity in the Pantin-In Area, Laung-Ione Township, Tanintharyi Region (M.Sc., Supervisor)
- 30) Planting Techniques of Anacardium occidentale L. (Cashew nut) and their Processing from Raw to Finished Products in the Laung-Lone Township, Dawei (M.Sc., Supervisor)
- 31) The study of Rubber *Hevea brasilinesis* Plantation and Processing from Raw to Finished Products (M.Res., Supervisor)
- 32) Socioeconomic development of "thin" utilization from tradition to modernity in Pantanaw Township, Ayeyarwady Division (M.Res., Supervisor)
- 33) Ecological Study in Hlawga Reservoir Reserve Area, Mingalardon Township, Yangon (M.Res., Supervisor)
- 34) The study of plant species diversity in Ban-bwe-gon Reservoir Reserve Forest, Kyauk-tan Township (M.Res., Supervisor)
- 35) The study of land degradation and conservation of agricultural land in Magway Township, Magway Division (M.Res., Supervisor)
- 36) The Study of Mangrove Soil and Growth Performance of Cultivated Mangrove Species in the Pyindaye Reserve Forest Area, Bogalay Township, Ayeyarwady Delta (M.Res., Supervisor)



- 37) Reforestation Management and Socioeconomic Condition of Taungya Cultivators in Selected Area of Pyinmana Township (M.Res., Internal examiner)
- 38) Study on Economic Important Plants of Taw-gyi-dan Agricultural Camp, Twante Township, Yangon Division (M.Res., Internal examiner)
- 39) Seasonal variation of plants in Ngwe-Yar Taung, Mingalardon Township (M.Res., Internal examiner)
- 40) A study on Waste Disposal System in Yangon University (M.Res., Internal examiner)
- 41) Phytosociological study of mangrove vegetation in Byone-hmwe Island, Ayeyarwady Delta, Myanmar Relationship between floristic composition and Habitat-; Mangrove Science, Japan. Vol. 3, 7-23, 04
- 42) Ecological study of mangrove vegetation in the Ayeyarwady Delta, Myanmar; ITTO, online article, 2004 (Japan)
- 43) Plant Species Diversity in Ywa-ngan Township, Southern Shan State; Universities Research Journal, Vol.2, 2009
- 44) Tree Species Diversity of Wet Dipterocarp Forest in the Taninthari Nature Reserved Forest, Taninthari Division; Dawei University Research Journal, Vol. II
- 45) Forest structure, composition and diversity in Kyauk-shut area, Tanintharyi Nature Reserve (TNR); University of Yangon, Research Journal Vol. 3, No.1

14 Certification:

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date: <u>12 December 2017</u>

Full name of authorized representative: ____ Dr. Myint Aung



Curriculum Vitae

- 1 Proposed Position: SIA expert
- 2 Name of Firm: Myanmar Sustainable Development Engineering Services Company Limited
- 3 Name of Staff: Prof. Dr. Than Aung Htwe
- **4 Date of Birth:** 26.06.1970

Nationality: Myanmar

5 Education:

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
University of Yangon, Yangon 1991 - 1995	Bachelor of Arts (Psychology)
University of Dagon, Yangon 2000 - 2001	Master of Arts (Psychology)
Gadjah Mada University, Yogyakarta, Indonesia 2001 - 2004	Master of Science (Psychology)
University of Yangon, Yangon 2008 - 2013	PhD (Psychology)

6 Membership of Professional Bodies:

a. Certified SIA Key Consultant (transitional registration No.: 10116)

7 Countries of Work Experience:

Myanmar

8 Languages:

Language	Reading	Speaking	Writing
Burmese	Mother Tongue		
English	Excellent	Excellent	Excellent

9 Employment Record:

From: 2016	To: Ongoing
Employer:	Department of Psychology, Maw La Myine University
Position held:	Professor

From: 2015To: 2016Employer:Department of Psychology, Taunggyi UniversityPosition held:Associate Professor

From:2012To:2015Employer:Department of Psychology, Dagon UniversityPositions held:Lecturer

From:2011To: 2012Employer:Department of Psychology, Pathein UniversityPositions held:Lecturer



From: 2010	To: 2011
Employer:	Department of Psychology, Pathein University
Positions held:	Assistant Lecturer
From: 2008	To: 2010
Employer:	Department of Psychology, Dagon University
Positions held:	Assistant Lecturer
From: 2006	To: 2008
Employer:	Department of Psychology, Dawei University
Positions held:	Assistant Lecturer
From: 1998	To: 2006
Employer:	Department of Psychology, Dagon University
Positions held:	Tutor

10 Detailed Tasks Assigned

Key qualifications:

- Social impact analysis
- Soical management planning

Projects Undertaken that Best Illustrates Capability to Handle the Tasks Assigned 12

Name of assignment or project: ESIA Review for A6 & AD7 Offshore Drilling Program

Year: 2016~ 24.11.2017

Location: Myanmar Marine near Rakkhine Coastal line

Client: Ministry of Natural Resources and Environmental Conservation (MONREC)

Positions held: Social Safeguard

Main project features: Ministry of Natural Resources and Environmental Conservation (MONREC) appointed Myanmar Sustainable Development Engineering Services Co., Ltd. (MSDES) to provide consultancy service to review two ESIA reports for deep water offshore drilling program of A6 (joint venture of MPRL E&P Pte Ltd. and Woodside Energy Myanmar Pte. Ltd. and Total E&P Myanmar) and AD-7 (joint venture of Woodside and POSCO Daewoo) in Myanmar sea near Rhakkhine coast.

Activities performed:

- Compliance check of proposed EIA reports with National environmental law, rules, EIA procedure, and IFC requirement Clarification and verification of technical matters,
- ESIA design adequacy check and identification of potential impacts on surrounding environment; request of supplementary information

• Suggestion and recommendation for Social study



Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for 18 MW Hydropower Project, Muse, Myanmar Year: 2015 to ongoing Location: Myanmar Client: Great Hor Kham Public Co Ltd. Positions held: Socio-economic Impact Specialist Main project features: social impact analysis and social management planning **Activities performed:** Designing SIA study Instrumentation for collecting socio-economic baseline data Managing field social survey Data management and analysis • Reporting socio-economic baseline information of the project area Reporting public consultation and participation results • Assessing potential project social impact and proposing mitigation and enhancement measures Preparing social management and monitoring plan Preparing CSR program recommendations Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for 500 Ton/Day **Integrated Rice Complex Project** Year: 2014 to 2015 Location: Myanmar **Client:** Myanmar Agribusiness Public Corporation Positions held: Socio-economic Impact Specialist Main project features: social impact analysis and social management planning **Activities performed: Designing SIA study** Instrumentation for collecting socio-economic baseline data Managing field social survey Data management and analysis • Reporting socio-economic baseline information of the project area Reporting public consultation and participation results Assessing potential project social impact and proposing mitigation and enhancement measures . Preparing social management and monitoring plan

13 Publications:

Investigating Research Self-efficacy in Relation to Research Training Environment and Interest in Research. (In Press). *Taunggyi University Research Journal*, Vol. 7. No.1.

Investigation of Organizational Justice and Its Correlates among Some Myanmar Basic Education School Teachers. (2014). *Journal of Myanmar Academy of Arts and Science,* Vol. XII. No. 10. Testing the Dimensionality of Global Self-Esteem and Evaluating Negative-Item Effect. (2013). *Journal of Myanmar Academy of Arts and Sciences,* Vol. XI. No.10.

Investigation of Item Wording Effect in the Myanmar Version of Rosenberg Self-Esteem Scale. (2013). *Universities Research Journal*, Vol.5.No.9.

Consequences of Organizational Justice among Myanmar Basic Education School Teachers. (2012). *Pathein University Research Journal*, Vol.4.No.1.

Measurement of Adolescent Ego Identity: Myanmar Translation of Ego Identity Process Questionnaire. (2013). *Journal of the Myanmar Academy of Arts and Science.* Vol. X.No.8.

Prof. Dr. Than Aung Htwe SIA Expert



Adaptation of the Big Five Personality Measures and Examination of Their Factor Structure. (2011). *Journal of the Myanmar Academy of Arts and Science*. Vol.IX.No.8.

Investigation of Personality Traits in Relation to Career Satisfaction and Life Satisfaction. (2011). *Pathein University Research Journal Vol.2.No.1.*

A Role of Psychosocial Factors on Career Anchors of Some Myanmar Workers. (2009). *University Research Journal*.Vol.2.No.9.

14 Certification:

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date: <u>12.12.2017</u>

Full name of authorized representative: ____ Dr. Than Aung Htwe



Curriculum Vitae

- 1 Proposed Position: Community and Occupational Health Consultant
- 2 Name of Firm: Myanmar Sustainable Development Engineering Services Company Limited
- 3 Name of Staff: Dr. Kyaw Maung Maung Hein
- 4 Date of Birth: 3rd July, 1989

Nationality: Myanmar

5 Education:

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
University of Medicine 2 (2005 – 2011)	M.B.,B.S (Ygn)
Yangon Technological University (2013 – 2014)	Dip EIA/EMS (Diploma in Environmental Impact Assessment and Environmental Management System)
Yangon University (2014 – 2015)	DBL (Diploma in Business Law)
Yangon University (2015 – 2016)	DIL (Diploma in International Law)

6 Membership of Professional Bodies:

- Life member of Myanmar Medical Association
- Certified HIA Consultant (transitional registration No.: 10118)

7 Countries of Work Experience: Myanmar

8 Languages:

Language	Reading	Speaking	Writing
Burmese	Mother Tongue		
English	Intermediate	Intermediate	Intermediate

9 Employment Record:

From:May 2016To: July 2017Employer:Myanmar Sustainable Development Engineering Services Co., Ltd.Positions held:Assistant Project Manager/ Assistant Environmental Consultant

From:April 2014To: April 2016Employer:Myanmar Sustainable Development Engineering Services Co., Ltd.Positions held:Assistant Project Manager/ Apprentice Environmental Consultant

10 Detailed Tasks Assigned

Key qualifications:

- Community and Occupational Health
- Project management



Projects Undertaken that Best Illustrates Capability to Handle the Tasks Assigned	
2	
ame of assignment or project: 20MW Hydropower Project, Muse Township	
ear: 2015 to ongoing	
ocation: Myanmar	
lient: Great Horkham Public Co., Ltd.	
ositions held: Assistant Project Manager/ Assistant Environmental Consultant	
lain project features: Hydropower	
ctivities performed:	
ssist in project management	
ealth Impact Assessment	
ampling (Collection, Processing for analysis)	
eport compilation	
ame of assignment or project: Integrated Rice Complex Project (IRCP), Twantay Township	
ear: 2013 to 2016	
ocation: Myanmar	
l ient: Myanmar Japan Rice Industry (MJRI)	
ositions held: Assistant Project Manager/ Assistant Environmental Consultant	
lain project features: Rice Mill Complex	
ctivities performed:	
ssist in project management (stakeholder meeting)	
eport compilation	

13 Publications: Nil

14 Certification:

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Lav

Date: <u>12.12.2017</u>

Full name of authorized representative: ____Dr. Kyaw Maung Maung Hein_____



Curriculum Vitae

- 1 Proposed Position: GIS/RS Consultant
- 2 Name of Firm: Myanmar Sustainable Development Engineering Services Company Limited
- 3 Name of Staff: Htet Arkar Soe
- **4 Date of Birth:** 22.5.1993

Nationality: Myanmar

5 Education: B. Sc (forestry)

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
2008 - 2013	B. Sc (Forestry)
2016 - 2017	RS & GIS (Diploma)

6 Membership of Professional Bodies:

- Myanmar Forest Association (MFA)
- Certified GIS/RS Consultant (transitional registration No.: 10113)

7 Countries of Work Experience: Myanmar (3.5 years)

8 Languages:

Language	Reading	Speaking	Writing
Burmese	Mother Tongue		
English	Good	Moderate	Good

9. Employment Record:

From:[2013]To:[2013]Employer:Great Wall GroupPositions held:Plantation Officer

From:[2013]To:[2015]Employer:[E guard Environmental Services Co., Ltd]Positions held:Research Assistant

From:[2016]To:[2017]Employer:Myanmar Sustainable Development Engineering Services Co., LtdPositions held:Apprentice environmental consultant & Project Coordinator

10 Detailed Tasks Assigned

Key qualifications:

- Remote sensing S & GIS (ECD consultant registration number 10113)
- Noise Impact assessment



11 Projects Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

Name of assignment or project: Dry Zone Water Supply Project (Phase 2)

Year: [2013] to [2014]

Location: [Myanmar]

Client: Japan International cooperation agency (JICA)

Positions held: Social survey leader and report assistant

Main project features: JICA study team cooperated with government organization for water supply in Dry zone, Myanmar started public consultation and socio economic study on ground of dry zone regions. For this project, local environmental assessment team, E guard environmental Co., Ltd played as role of socio economic surveying in which pre study cases operated before supplement.

Activities performed:

- Public consultation and stakeholder meeting in three regions.
- Assist to Data Analysis.
- Social Data Acquisition
- Project coordinating

Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for Nam Paw Hydropower Project, Muse, Myanmar

Year: 2015 to ongoing

Location: Myanmar

Client: Great Hor Kham Co Ltd.

Positions held: Apprentice environmental consultant and Project Coordinator

Main project features:

Nam Paw Hydropower Project developed by Great Hor Kham Public Company Limited at Muse Township, Myanmar will fulfil the regional electrical requirement through connecting national grid. Feasibility study was conducted by Hunan Hydro & Power Design Institute, China and Myanmar Sustainable Development Engineering Services Company Limited took responsibility for Environmental, Socio-economic and Health Impact Assessment. Dam breaking analysis is being conducted by SYDRO, Germany.

Activities performed:

To understand existing baseline noise and traffic conditions of Muse City possibly affected project activities and status of vehicles were collected and surveyed vehicles for existing primary data. Using RS & GIS, spatial analysis on traffic condition was studied to choose effective alternative roads to project construction site based on ground survey. For noise contour mapping, existing ambient noise condition was assessed where project affected areas located. According to impact assessment, possible mitigation measures were suggested to enhance positive impacts and to minimize negative impact as much as possible.

Assist in Environmental sampling (Surface water, groundwater, sediment, soil, paddy soil)

12 Publications: NIL

13 Certification: ISO 9001:2015 (Internal Auditor Training Course, Awareness & Interpretation of ISO 9001:2015 Requirements)

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead

Htet Arkar Soe GIS/RS Expert



to my disqualification or dismissal, if engaged.

[Sign]

_Date: ____<u>12.12.2017</u>_____

Full name of authorized representative: _____Htet Arkar Soe______

Curriculum Vitae

1	Proposed Position:	Legal Analyst	
2	Name of Firm:	Myanmar Sustainable Developmen	t Engineering Services Company
Limite	ed		
3	Name of Staff:	Ms Chit Hsu San	
4	Date of Birth:	08.07.1993	Nationality: Myanmar

5 Education: LL.M (Master of Law)

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
Yangon University, 2009 - 2013	Bachelor of Law (LL.B)
Yangon University, 2013 - 2016	Master of Law (LL.M)
Yangon University,	Master of Research (MRes)

6 Membership of Professional Bodies:

Certified legal Consultant (transitional registration No.: 10117)

7	Countries of Work Experience:	2 years
		Myanmar

8 Languages:

Language	Reading	Speaking	Writing
Burmese	d and a second sec	Mother Tongue	
English	good	good	good

9 Employment Record:

From:2015To: RecentEmployer:Myanmar Sustainable Development Engineering Services Co., Ltd., MyanmarPositions held:Legal consultant

10 Detailed Tasks Assigned

Key qualifications:

• Legal Analysis (Consultant Registration No. 10117)

11 Projects Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

Name of assignment or project: Environmental and Social Impact Assessment (ESIA) for Nam Paw Hydropower Project, Muse, Myanmar

Year: 2015 to ongoing

Location: Myanmar

Client: Great Hor Kham Public Co Ltd.

Positions held: Assistant environmental consultant

Main project features:

Nam Paw Hydropower Project developed by Great Hor Kham Public Company Limited at Muse Township, Myanmar will fulfil the regional electrical requirement through connecting national grid. Feasibility study was conducted by Hunan Hydro & Power Design Institute, China and Myanmar Sustainable Development Engineering Services Company Limited took responsibility for Environmental, Socio-economic and Health Impact Assessment. Dam breaking analysis is being conducted by SYDRO, Germany.

Activities performed:

Relevant environmental laws and regulations in Myanmar were studied based on project information and potential effect on existing environment and socio-economy. Additionally, International treaties and conventions related to environmental affairs were considered in this report..

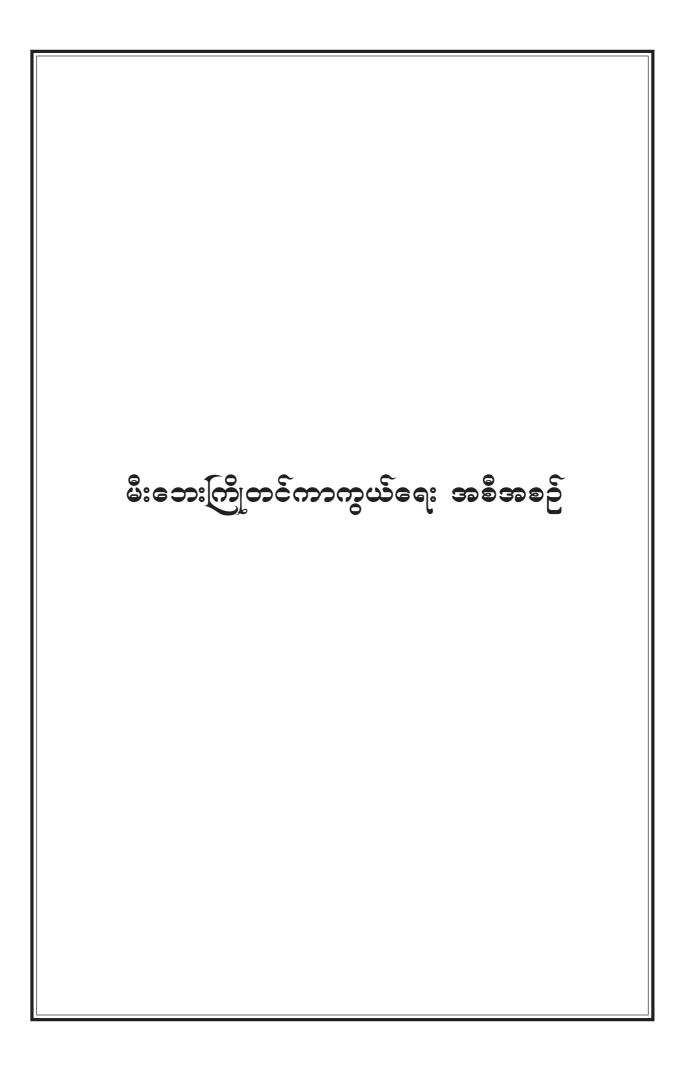
12 Publications:

13 Certification:

I, the undersigned, certify that to the best of my knowledge and believe, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

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ZZ:	/			
2				
		Date:	12.12.2017	

Full name of authorized representative: _____Ms Chit Hsu San_____



Fire Protection Programme

145.45MW Gas Engine Power Plant Project, Kyaukse District, Mandalay Region, Myanmar

Introduction

This fire protection program is systematically drawn to prevent from fire break out in the project area of 145.45 MW Gas Engine Power Plant Project, Kyaukse District, Mandalay Region and make necessary preparation which will be able to put out the fire immediately in case of emergency.

Organization

This program is drawn and carried out by "PowerGen Kyaukse Company Limited"

Objectives

Fire Protection Program establishes to prevent from the loss of power plant including machineries, equipment, building, personal and circulation system of the Project area.

Facts of causing fire

The main facts of causing fire are as flows:

- (a) Arson made by unjust people in any ways
- (b) Unsystematic Installation and usage of electricity
- (c) Negligence in using fire
- (d) Fire break out starting from the surrounding such as buildings, houses, fields and etc.,
- (e) Events of the chemical incident

Procedures to be carried out

The following prevention measures shall be performed to protect from the cause of fire breakout:

- (a) To train people with the support Township fire departments
- (b) To form the fire protection and fire fighters teams.
- (c) To train practical proper usage of fire extinguisher, fire bucket, fire sand, fire stick and fire hook occasionally.
- (d) To prohibit using match lighter near the flammable or combustible material, take serious action if necessary, to fix smoking area.
- (e) To put out and systematically thrown away pieces of fire from the oven and cigarette.
- (f) To hang-up visibly fire precaution signboard, wall poster such as Fire Caution, No Smoking, etc. in necessary places.

- (g) To set a specific smoking place, do not keep the flammable or combustible material near that place.
- (h) To examine and report whether the fire-extinguishers are good or not at least every fifteen days. Near the fire-extinguishers, to hang-up the board in Myanmar Language.
- (i) To use electrical devices, Wires systematically and responsible persons to examine daily where there is wires burst.
- (j) To remove the fire blockade of article in front of the electric switch & fuse for easy switch off.
- (k) To clear burnable articles such as light switch, web, floss near light and to put fire extinguisher nearby to put out fire causing by electric & diesel.
- (l) To switch off the light after the work.
- (m) To service sprinkler or fire alarm system annually.
- (n) To maintain fire protection systems in an operative condition at all time and repaired where defective.
- (o) Not to block any items at the fire hydrants and fire connections. To place the telephone numbers in the visible places in order to contact when fire breaks out;

(l) Fire Department	01-384420???
(2) People' Police Force	01-635074???
(3) Hospital	01-384493???

- (p) To set up the First Aid procedure in front of the reception counter.
- (q) To learn fire-fighting instructions issued by the fire department.
- (r) To place the following materials in the visible place and easy accessible places;
 - (1) Fire extinguisher
 - (2) Sand bucket
 - (3) The bucket of water
 - (4) Fire stick
 - (5) Fire hook
 - (6) Touch light for using at night
 - (7) Axe

If fire breaks out in working hours, report to General Manager, Security Officer and Company Manager. Admin Manager, Security Officer and Admin Department quickly inform to the nearest Fire Bridges, People's Police Force and Hospital. The Fire Fighters Teams take responsible to put out the fire.

If fire breaks out outside the office, inform to officer.

Building Teams

To build the Supervisory Fire Fighters Team, Security Team and Rescue & Materials Moving Teams

Duties and Responsibilities of Fire Fighters Team

- (a) To observe in advance the place of fire extinguisher, fire stick, fire hook, sand bucket, light switch, main switch, etc. and to train the team to use *materials* in case of fire.
- (b) To practice to be able to use the fire extinguisher, fire stick, fire hook, sand bucket if necessary.
- (c) The members of the Fire Fighters Team at the *place* of fire or at the nearest place quickly put out the fire systematically before bursting into big flames. The rest members bring the fire extinguisher, fire stick; fire hook and sand bucket and extinguish the fire. Give the necessary assistant if the fire fighters get to the place of fire.
- (d) In case of fire, turn off the electric FUSE and Main Switch immediately.

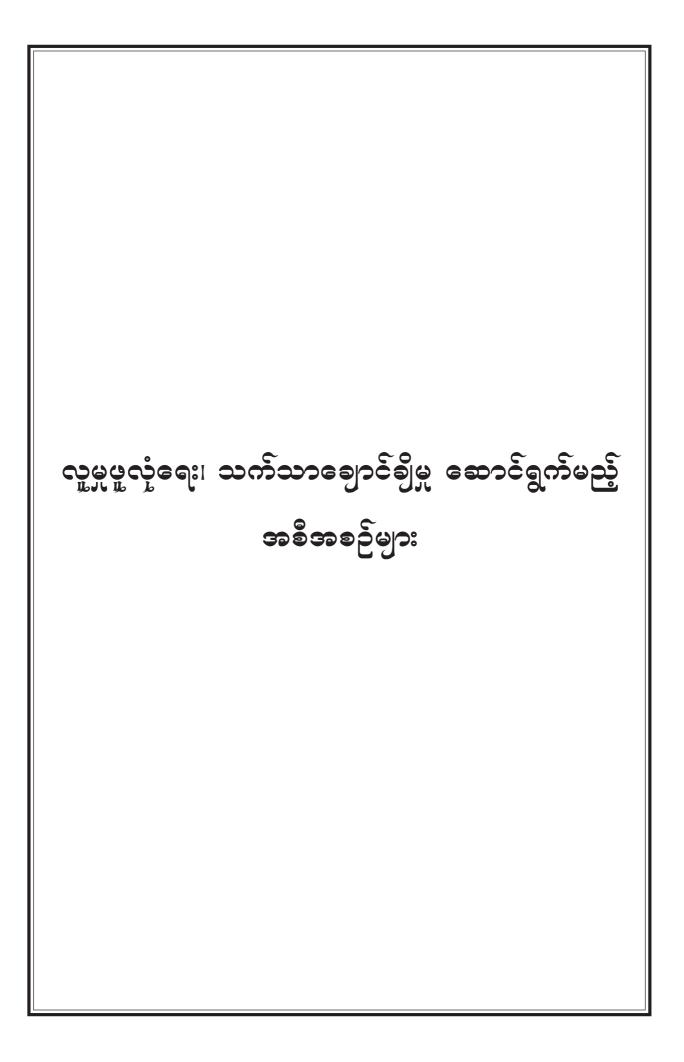
The Duties and Responsibilities of Security Team

- (a) To carry out necessity for the safety of company staff and the security of company property.
- (b) To ask for responsibility for the safety to the members of security team in moving company own valuable properties, company own documents and materials to the other place giving priority not for getting burned in time of fire.
- (c) To assist and coordinate with the security members burned in time of fire.
- (d) To allow only in charge persons and members to enter, not allow any other. If not necessary, lock the main door burned in time of fire.
- (e) To return the Company own valuable properties, other documents and materials to the relevant persons systematically after getting over fire.

Rescue and Materials Moving Team

- (a) To move factory own cash, valuable things and other important documents and materials to the safe place quickly according to the priority rank of materials. If necessary, ask permission to use Company cars from the responsible person for moving things.
- (b) To coordinate with Security members and set the safe place for the moved cash and materials.
- (c) To pay special attention not to lose or damage of any cash and materials when moving cash and materials to the place free from fire.

- (d) To move the injured persons in the fire to the necessary place.
- (e) To coordinate with the Factory car drivers.
- (f) Not to get injured the staffs and if it does, coordinate with the Factory clinic doctors and nurses.
- (g) To help and rescue the ill persons, disable staffs in time of fire.
- (h) To remove patient to fresh air, lay down and rest
- (i) Of patient is not breathing, make sure airway is clear and applies artificial respiration.
 Oxygen may be given, but only under supervision of a trained person.
- (j) To keep patient warm.
- (k) To call doctor at once or transport to doctor or hospital.



Social & Welfare Plan

- 1. Planning to create the safety and Pleasant Working Conditions & Environment as follows:
 - To construct the proper drainage system to get clean weather and fresh air ventilation system
 - To grow trees and beautiful flower plants in the compound of the 145.45 MW Gas Engine Power Plant Project ("Project")
 - To arrange enough and suitable benches and tables for lunch and resting for workers
 - To train the workers to participate individually in "Project" sanitation works and to arrange garbage bins around and the "Project" and the workers to do their jobs in the clean and pleasant environment
 - To arrange getting fresh air-ventilation at the working places with open windows exhaust fans and air –conditioner
 - To construct clean and hygienic toilets separating between man and women workers Daily sanitation shall be done using proper pest control system
 - To modify clear working procedures /rules
 - To help employees understand and collaborate with each other to complete their jobs effectively
 - To respect the differences of personal characteristic or identities between employees in the company
 - To learn more about the expectations of employees and the reasons they choose to work here
 - To educate staff on maintaining good personal bygiene, and wash hands with soap and water frequently
- 2. Planning to create the Social Welfares Fund for works as follows:
 - To arrange ferries for workers daily with proper vehicles without charges
 - To arrange first aid kits and facilities and special health care for staff with qualified healthcare certificate
 - To engage an in-house doctor for medical attention for all staff
 - To arrange purified drinking water
 - To take care the workers immediately when accidents happen by sending the injured workers to hospitals if necessary and these workers shall be given adequate care
 - To appoint workers by signing the contract according to prevailing Myanmar Laws.
 - To follow the minimum wage system lay down by the relevant authorities
 - To pay over time charges according to the rules and regulations
 - To arrange uniforms
- 3. Safe Working Conditions

For the Management of "POWERGEN KYAUKSE", the "Project" has the following plans /actions in plance:

- Project safe Work Practices
- > In house Workplaces Safety and Health Rules and Regulations
- Fire Protection Program
- Emergency Plan
- Control of Consultant and Contractors
- Workplace Safety and Training
- Group Meeting
- Incident Investigations and Analysis
- ➢ Workplace Safety and Health Risk Assessment
- Occupational Health Programs
- ➢ Workplace Safety and Health Review and Audit
- First Aid Station
- 4. Corrective and Preventive Action

In the event of any non-compliance with the necessary measures, the Property/Project Manager shall require the errant main contractor staff or subcontractors to propose and implement immediately rectification measures so as to prevent future recurrence.

The Property/Project Manager shall adopt appropriate measures on any recalcitrant main contractor staff or sub-contractors who have persisted in failing to comply with rectification measures proposed. Measures may include, but not limiting, to issuing of warning letters, the imposition of administrative charges and demerit points or the debarment of subcontractors from future contractor tender exercise conducted. The Property/Project Manager also reserve the right to remove any staff or subcontractors from the site if they have been found incapable of adopting good preventive measures in the scope of work.

There are also basis site workplace safety and health rules, these are

- Safety helmet must be properly worn at all times while working on side, where applicable
- Safety shoes must be properly worn while working on side, where applicable
- Safety glasses must b worn when exposed to possible eyes injury
- No throwing of things from height
- Good housekeeping to be practiced everyday
- Obey all WSH and warning signs

Personal WSH rules

- Understand the job hazards and WSH procedures before embarking on the job
- Obey all WSH and warning signs
- No horseplay is allowed during work
- Report all unsafe conditions and practices to attention of the supervisor in charged
- All incidents regardless of severity must be reported immediately to the immediate supervisor
- Unauthorized operation of machinery, equipment and vehicle is strictly prohibited on site
- Think "Safety First" before you start work

• Does not litter drain cans, cigarette butts or food containers at the work place and keep work area clean at all time

Corporate Social Responsibilities

The company "PowerGen Kyauske" pays the highest attention to corporate social responsibility, and multiple approaches will be employed for the best interest of both the community and the "Project". We will contribute one percent (1%) of our net profit after tax annually; such contribution shall be subject to periodic review and the funds are to be allocated in the following areas:

- 1) Education (Scholarship programs, establishing schools and their maintenance)
- 2) Health (Donations to village hospitals and village health centers; setting up of sanitation systems for villages)
- 3) Regional Development(Establishing and construction of roads, water tube wells and electricity supply to villages)
- 4) Social Development (Donations to fire bridges and other social welfare services)
- 5) Religion (Donations to monasteries and pagodas of villages)



POWERGEN KYAUKSE COMPANY LIMITED

NO.(36), THEIN PHYU ROAD, PAZUNDAUNG TOWNSHIP, YANGON, MYANMAR TEL: (95-1) 8610654, 8610656~59. FAX: (95-1) 200273, 295067

> ။ PGK/KS-135/MIC- 24 /2018 ။၂၀၁၈ခုနှစ်၊ ဩဂုတ်လ(၆) ရက်

စာအမှတ်။ ရက်စွဲ။

သို့

ဥက္ကဌ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုကော်မရှင်

အကြောင်းအရာ။ မြန်မာနိုင်ငံရင်းနှီး မြုပ်နှံမှုကော်မရှင်သို့ အဆိုပြုတင်ပြသည့် လုပ်ငန်းနှင့် ပတ်သက်၍ ကတိခံဝန်ချက်။

- ၁။ အထက်အကြောင်းအရာပါ ကိစ္စနှင့်ပတ်သက်၍ ကျွန်တော်များ The NIHC Consortium သည် မန္တလေးတိုင်း၊ ကျောက်ဆည်ခရိုင်၊ စဉ့်ကိုင်မြို့နယ် (230 kV) ဘဲလင်းဓါတ်အားခွဲရုံဝန်း အတွင်း (145.49 MW) ဓါတ်အားပေးစက်ရုံ တည်ဆောက်ပြီး ဓါတ်အားထုတ်လုပ်ရေး စီမံကိန်းအား အကောင်အထည်ဖော်ဆောင်ရွက်ရန် ဖက်စပ်ကုမ္ပဏီအဖြစ် PowerGen Kyaukse Co..Ltd ကို (၂၇-၆-၂၀၁၈)နေ့တွင် ကုမ္ပဏီမှတ်ပုံတင်အမှတ် (၃၁၄အက်ဖ်စီ/၂၀၁၈-၂၀၁၉ (ရက)) ဖြင့် ဖွဲ့စည်းတည်ထောင်ထားပြီးဖြစ်ပါသည်။ အဆိုပါ စီမံကိန်းမှ လျှပ်စစ်ဓါတ်အား ထုတ်လုပ်သည့် လုပ်ငန်းအတွက် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ကော်မရှင်သို့ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေနှင့်အညီ ခွင့်ပြုမိန့် လျှောက်ထားသည့်ကုမ္ပဏီ ဖြစ်ပါသည်။
- ၂။ အဆိုပြုသည့် ဝန်ဆောင်လုပ်ငန်းများတွင် ဝန်ထမ်းများခန့်ထားခြင်းအတွက် ဝင်ငွေခွန်ဥပဒေ နှင့် အညီပေးသွင်းရမည့် ဝင်ငွေခွန်ကို ယင်းတို့၏လစာမှ ထုတ်နှုတ်၍ ပြည်တွင်းအခွန်များ ဦးစီးဌာနသို့ ပေးသွင်းဆောင်ရွက်သွားမည်ဖြစ်ပါကြောင်း ဝန်ခံ ကတိပြုအပ်ပါသည်။

ရှိသေလွေးစားစွာဖြင့် MAUNO KYAY MANAGING DIRECTOR POWERGEN KYAUKSE CO., LTD.

POWERGEN KYAUKSE COMPANY LIMITED

NO.(36), THEIN PHYU ROAD, PAZUNDAUNG TOWNSHIP, YANGON, MYANMAR TEL: (95-1) 8610654, 8610656~59. FAX: (95-1) 200273, 295067

> စာအမှတ်။ ရက်စွဲ။

PGK/KS-135/MIC- 25 /2018 ။၂၀၁၈ခုနှစ်၊ ဩဂုတ်လ(🐷) ရက်

သို့

ဥက္ကဌ မြန်မာနိုင်ငံရင်းနီးမြုပ်နံမှုကော်မရှင်

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- ၂။ အဆိုပြု လုပ်ငန်းသည် ဖက်စပ်ကုမ္ပဏီမှ ပိုင်ဆိုင်သော လုပ်ငန်းဖြစ်ပါသည်။
- ၃။ အဆိုပြုလုပ်ငန်းအတွက် နိုင်ငံခြားချေးငွေများ ရယူဆောင်ရွက်ခြင်းများနှင့်ပတ်သက်၍ ကုမ္ပဏီ နှင့် ချေးငှားသူတို့သာလျင်သက်ဆိုင်ပြီး နိုင်ငံတော်နှင့် ပတ်သက်ခြင်းမရှိပါကြောင်း ဝန်ခံ ကတိပြုအပ်ပါသည်။
- ၄။ အဆိုပြုလုပ်ငန်းသည် လုပ်ငန်းအသစ်ဖြစ်ကြောင်း ဝန်ခံကတိပြုပါသည်။
- ၅။ အဆိုပြုလုပ်ငန်းတွင် သဘာဝပတ်ဝန်းကျင် အခြေအနေယုတ်လျော့မှု မရှိအောင် ထိန်းသိမ်း ခြင်း နှင့် မီးဘေးအန္တရာယ် မကျရောက်ရန် ထိန်းသိမ်းသွားပါမည်။

ရှိသေလေးစြားစွာဖြင့် MAUNGKYAY MANAGING DIRECTOR

POWERGEN KYAUKSE CO., LTD

POWERGEN KYAUKSE COMPANY LIMITED

NO.(36), THEIN PHYU ROAD, PAZUNDAUNG TOWNSHIP, YANGON, MYANMAR TEL: (95-1) 8610654, 8610656~59. FAX: (95-1) 200273, 295067

PGK /KS-135/MIC- 26 /2018

။၂၀၁၈ခုနှစ်၊ ဩဂုတ်လ(🕼) ရက်

စာအမှတ်။ ရက်စွဲ။

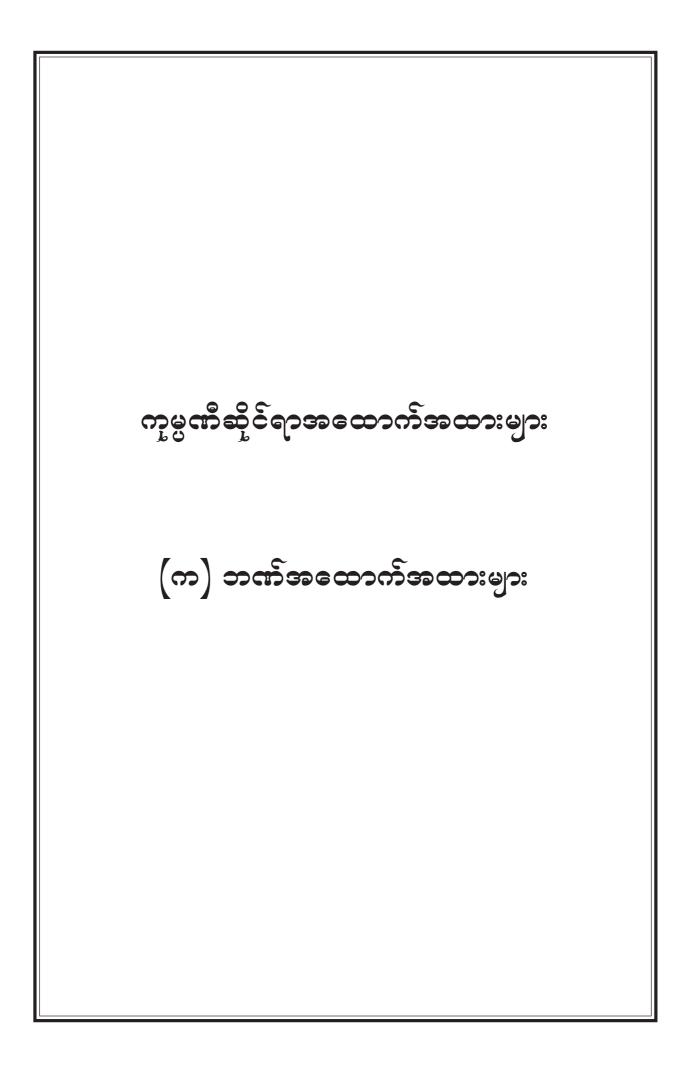
သို့

ဥက္ကဌ မြန်မာနိုင်ငံရင်းနီးမြုပ်နံ့မှုကော်မရှင်

အကြောင်းအရာ။ မြန်မာနိုင်ငံရင်းနှီး မြုပ်နှံမှုကော်မရှင်သို့ အဆိုပြုတင်ပြသည့် လုပ်ငန်းနှင့် ပတ်သက်၍ ကတိခံဝန်ချက်။

- ၁။ အထက်အကြောင်းအရာပါ ကိစ္စနှင့်ပတ်သက်၍ ကျွန်တော်များ The NIHC Consortium သည် မန္တလေးတိုင်း၊ ကျောက်ဆည်ခရိုင်၊ စဉ့်ကိုင်မြို့နယ် (230 kV) ဘဲလင်းဓါတ်အားခွဲရုံဝန်း အတွင်း (145.49 MW) ဓါတ်အားပေးစက်ရုံ တည်ဆောက်ပြီး ဓါတ်အားထုတ်လုပ်ရေး စီမံကိန်းအား အကောင်အထည်ဖော်ဆောင်ရွက်ရန် ဖက်စပ်ကုမ္ပဏီအဖြစ် PowerGen Kyaukse Co .Ltd ကို (၂၇-၆-၂၀၁၈)တွင် ကုမ္ပဏီမှတ်ပုံတင်အမှတ် (၃၁၄အက်ဖ်စီ /၂၀၁၈-၂၀၁၉ (ရက)) ဖြင့် ဖွဲ့စည်းတည်ထောင်ထားပြီးဖြစ်ပါသည်။ အဆိုပါ စီမံကိန်းမှ လျှပ်စစ်ဓါတ်အား ထုတ်လုပ်သည့် လုပ်ငန်းအတွက် မြန်မာနိုင်ငံ ရင်းနှီးမြှုပ်နှံမှု ကော်မရှင်သို့ မြန်မာနိုင်ငံရင်းနှီးမြှုပ်နှံမှုဥပဒေနှင့် အညီခွင့်ပြုမိန့် လျှောက်ထားသည့် ကုမ္ပဏီဖြစ်ပါသည်။
- ၂။ အဆိုပြုသည့် ဝန်ဆောင်မှုလုပ်ငန်းများဆောင်ရွက်ရာတွင် ဖြစ်ပေါ် လာမည့် အသားတင် အမြတ်မှ တစ်(၁) ရာခိုင်နှုန်းအား ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာ ကိစ္စရပ်များတွင် အသုံးပြုရန်အတွက် ဖယ်ချန်လျက် ဆောင်ရွက်သွားမည်ဖြစ်ပါကြောင်း ဝန်ခံကတိပြုအပ် ပါသည်။

ရှိသေလေးစားစွာဖြင့် MAIDIGKVA MANAOING DERECTOR POWERG



MYANMA FOREIGN TRADE BANK

BANK STATEMENT

Account No:1DA0405506Name of Account:NATIONAL INFRASTRUCTURE HOLDINGS CO; LTDAddress:NO.36, THEINPHYU ROAD ,PAZUNDAUNG T/S, YGN.Bank Statement for the month of:From 01/03/2018 To 05/03/2018

Print Date & Time : 24/07/2018-02:52 PM

Date	Particular	Chq; No.	C/T/L	CUR	Debit	. Credit	Balance
	BALANCE FORWARD			USD			4,145.59
05/03/2018	FR 1DA0495758 ORIENT PEARL CO LTD	L	TRF	USD		1,460,000.00	1,464,145.59
	Grand Total				0.00	1,460,000.00	

Unless the Bank is immediately notified of any discrepancy found in the statement of account, it will be taken that the account has been found to be correct.

TRANSACTION CODE CSH = CASH TRF = TRANSFER CLG = CLEARING

Number Of Debit =0 Number Of Credit =1

Asst: Manager Current Account Section Myannia Forest, MANA Bart

MANAGER

1

MYANMA FOREIGN TRADE BANK

BANK STATEMENT

Account No: Name of Account: Address:

1KA0400039 NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD NO.36, THEINPHYU RD, PAZUNDAUNG T/S, YANGON

Bank Statement for the month of : From 01/08/2016 To 15/08/2016

Print Date & Time :15/06/2017-12

Date	Particular	Chq; NoC/T/L	Debit	Credit	Balan
	BALANCE FORWARD				0.
12/08/2016	œ	CSH		10,000.00	10,000.
15/08/2016	AYA/A	CLG		500,000,000.00	\$00,010,060.
15/08/2016	KBZ /A	CLG		500,000,000.00	1,000,010,000,
15/08/2016	KBZ/A	CLG		500,000,000.00	1,500,010,000
15/08/2016	KBZ/A	CLG		500,000,000.00	2,000,010,000.
15/08/2016	KBZ/A	CLG		82,300,000.00	2,082,310,000
15/08/2016	AYA/A	CLG		500,000,000.00	2,582,310,000.
	Grand Total		0.00	2,582,310,000.00	2,582,310,000

Unless the Bank is immediately notified of any discrepancy found in the statement of account, it will be taken that the account has been found to be correct.

TRANSACTION CODE

CSH = CASH TRF = TRANSFER CLG = CLEARING Number Of Debit =0 Number Of Credit =7

MANAGER

15/6 Assr: Manager Current decisions Sections Somma Foreign Teads Dam ASST: MANAGER

MYANMA FOREIGN TRADE BANK

BANK STATEMENT

5

Account No: Name of Account: Address:

1DA0496700 MYANMAR CHEMICAL MACHINERY CO LTD 1120-1121, THUMINGALAR ST, THINGANGYUN T/S, YGN. Bank Statement for the month of : From 01/04/2016 To 31/03/2017

Print Date & Time : 18/07/2018-03:39 PM Date Particular Chq; No. C/T/L CUR Debit Credit **Balance** BALANCE FORWARD USD 118,846.63 60707/G/2015-2016(P) 06/04/2016 TRF USD 1,600.00 120,446.63 06/04/2016 60575/G/2015-2016(P) TRF USD 308.00 120,754.63 22/04/2016 60650/G/2015-2016(P) 4,690.00 TRF USD 125,444.63 31/05/2016 60546/G/2015-2016(P) L TRF USD 200.00 125,244.63 31/05/2016 60545/G/2015-2016(P) L TRF USD 585.00 124,659.63 09/06/2016 / ITTP2487/16 TRF USD 5,480,242.00 5,604,901.63 13/06/2016 61072/G/2015-2016(P) TRF USD 870.00 5,605,771.63 14/06/2016 60649/G/2015-2016(P) L TRF USD 3,830.00 5,601,941.63 14/06/2016 60608/G/2015-2016(P) L TRF USD 8,740.92 5,593,200.71 14/06/2016 60682/G/2015-2016(P) L TRF USD 22,980.00 5,570,220.71 17/06/2016 61140/G/2014-2015(P) TRF USD 26,480.15 5,596,700.86 17/06/2016 61141/G/2014-2015(P) TRF USD 13,274.00 5,609,974.86 17/06/2016 60609/G/2015-2016(P) L TRF USD 1,456.83 5,608,518.03 20/06/2016 60089/G/2016-2017(P) L TRF USD 5,480,242.00 128,276.03 22/06/2016 60118/G/2015-2016(P) L TRF USD 61.96 128,214.07 29/07/2016 / 60118/G/2015-2016(P) TRF USD 24,783.00 152,997.07 03/08/2016 / 60153/G/2016-2017(P) L TRF USD 2,663.00 150,334.07 03/08/2016 60154/G/2016-2017(P) L TRF USD 9,802.00 140,532.07 16/08/2016 ITTP043082016 TRF L USD 1,999,985.00 2,140,517.07 17/08/2016 60193/G/2016-2017(P) TRF 2,015,000.00 L USD 125,517.07 18/08/2016 60111/G/2015-2016(P) L TRF USD 179.07 125,338.00 18/08/2016 61050/G/2014-2015(P) TRF L USD 3,425.16 121,912.84 31/08/2016 61189/G/2015-2016(P) TRF L USD 3,479.50 118,433.34 31/08/2016 61188/G/2015-2016(P) L TRF USD 27,836.00 90,597.34

PrintedBy : HNIN NWE NI KHIN

Page No1

Bank Statement for the month of : From 01/04/2016 To 31/03/2017

6

- <u> </u>	Particular	Chq; No.	С/ТЛ	CUP	Debit	Date & Time : 18/07 Credit	Balance
	✓ 60244/G/2016-2017(P)	•				Creatt	
30/09/2016	Auto Exchange Adj Vr	L	TRF	USD	25,187.50		65,409.84
50/09/2010	Auto Exchange Auj VI		TRF	MM K			65,409.84
05/10/2016	• 60374/G/2016-2017(P)	L	TRF	USD	30,225.00		35,184.84
25/10/2016	61141/G/2015-2016(P)		TRF	USD		1,829,520.00	1,864,704.84
25/10/2016	60487/G/2016-2017(P)	L	TRF	USD	3,107.00		1,861,597.84
04/11/2016	/ 61140/G/2015-2016(P)		TRF	USD		228,690.00	2,090,287.84
17/11/2016	60627/G/2016-2017(P)	L	TRF	USD	1,540.00		2,088,747.84
18/11/2016	60111/G/2015-2016(P)		TRF	USD		71,447.43	2,160,195.27
23/11/2016	60666/G/2016-2017(P)	L	TRF	USD	1,828.00		2,158,367.27
22/12/2016	61319/G/2015-2016(P)		TRF	USD		150,000.00	2,308,367.27
26/12/2016	60820/G/2016-2017(P)	L	TRF	USD	16,284.00		2,292,083.27
05/01/2017	60374/G/2016-2017(P)		TRF	USD		30,000.00	2,322,083.27
31/01/2017	61111/G/2016-2017(P)	L	TRF	USD	847.00		2,321,236.27
31/01/2017	61110/G/2016-2017(P)	L	TRF	USD	1,028.00		2,320,208.27
31/01/2017	61112/G/2016-2017(P)	L	TRF	USD	10,210.00		2,309,998.27
31/01/2017	61108/G/2016-2017(P)	L	TRF	USD	18,684.00		2,291,314.27
31/01/2017	61107/G/2016-2017(P)	L	TRF	USD	91,859.50		2,199,454.77
31/01/2017	61113/G/2016-2017(P)	L	TRF	USD	112,616.62		2,086,838.15
01/02/2017	✓ 61115/G/2016-2017(P)	L	TRF	USD	529.00		2,086,309.15
01/02/2017	61109/G/2016-2017(P)	L	TRF	USD	8,907.00		2,077,402.15
01/02/2017	61116/G/2016-2017(P)	L	TRF	USD	10,670.00		2,066,732.15
02/02/2017	61118/G/2016-2017(P)	L	TRF	USD	118,487.24		1,948,244.91
02/02/2017	61119/G/2016-2017(P)	~ L	TRF	USD	943,205.35		1,005,039.56
09/02/2017	60153/G/2016-2017(P)	L	TRF	USD	743,205.55	2,463.00	
14/02/2017	60627/G/16-17(P)		TRF	USD		1,440.00	1,007,502.56
15/02/2017	60487/G/16-17(P)		TRF	USD		-	1,008,942.56
15/02/2017	60154/G/16-17(P)					2,907.00	1,011,849.56
23/02/2017	61251/G/16-17(P)	T	TRF	USD		9,602.00	1,021,451.56
		L	TRF	USD	4,006.00		1,017,445.56

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Page No2

Bank Statement for the month of : From 01/04/2016 To 31/03/2017



Print Date & Time : 18/07/2018-03:39 PM

Date	Particular	Chq; No.	C/T/L	CUR	Debit	Credit	Balance
23/02/2017	<61253/G/16-17(P)	E.	TRF	USD	31,404.24		986,041.32
10/03/2017	61050/G/14-15(P)	L	TRF	USD	3,425.15		982,616.17
10/03/2017	61372/G/16-17(P)	L	TRF	USD	11,810.00		970,806.17
20/03/2017	61429/G/16-17(P)	L	TRF	USD	131,285.16		839,521.01
22/03/2017	60244/G/16-17(P)		TRF	USD		25,000.00	864,521.01
31/03/2017	Auto Exchange Adj Vr		TRF	MM K			864,521.01
	Grand Total				9,157,627.20	9,903,301 58	

Unless the Bank is immediately notified of any discrepancy found in the statement of account, it will be taken that the account has been found to be correct.

TRANSACTION CODE

CSH = CASH TRF = TRANSFER CLG = CLEARING

Number Of Debit =37 Number Of Credit =19

MANAGER

Asat: Manager Current Acceptint Section ASST, MANAGER Myonimo Fareign Trade Bank

ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ စီမံကိန်းနှင့်ဘဏ္ဍာရေဝန်ကြီးဌာန

ကုမ္ပဏီမှတ်ပုံတင်လက်မှတ် (ယာယီ) _{အမှတ်} ၃၁၄အက်ဖိစီ / ၂၀၁၈–၂၀၁၉ (ရက)

မြန်မာနိုင်ငံ တုမ္ပဏီများ အက်ဥပဒေအရ <mark>...မါဝါဂျန် ကျောက်ဆည် ကုမ္ပဏီ .လီမိတက် ..</mark>အား ပေးရန်တာဝန် ကန့်သတ်ထားသော လီမိတက် ကုမ္ပဏီအဖြစ် ..၂**၀၁**အုစ်လ၊၂.၇ .ရက်နေ့တွင် မှတ်ပုံတင်ခွင့်ပြုံလိုတ်သည်။

> ညွှန်ကြားရေးမှူးရျှဝ်(ကိုယ်စား) (မျိုးမင်း ၊ ညွှန်ကြားရေးမှူး) ရင်းနှီးမြှုဝ်နှံမှုနှင့်ကုမ္ပဏီများညွှန်ကြားမှိဦးစီးဌာန

THE GOVERNMENT OF THE REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF PLANNING AND FINANCE

CERTIFICATE OF INCORPORATION (TEMPORARY)

NO. 314FC of 2018-2019 (YGN)

I hereby certify thaPOWERGEN_KYAUKSE_COMPANY_LIMITED.

is incorporated

under the Myanmar Companies Act as a Limited Company on the

TWENTY-SEVENTH day of JUNE

TWO THOUSAND AND EIGHTEEN

For Director General (Myo Min - Director) Directorate of Investment and Company Administration ဤကုန္မဏီ မှတ်ပုံတင် လက်မှတ်(ယာယီ)သည် မှတ်ပုံတင်ရက်စွဲ (၂၇–၆–၂၀၁၈) မှု (၂၆–၁၂–၂၀၁၈) ရက်နှေအထိ (၆)လသက်တမ်း အတွက်သာ ဖြစ်သည်။ ယာလီသက်တမ်း ကျေန်ဆုံးမီ အမြဲတမ်းမှတ်ပုံတင် လက်မှတ် (မူရင်း)နှင့် လဲလှယ်ရမည်ဖြစ်ပါသည်။

3 8

ညွှန်ကြားရေးမှူးချုပ်(ကိုယ်စား) (သက်ပိုင်အုတိယညွှန်ကြားရေးမှူး)

Issued Date:

1	MINISTRY OF PLANNI FORM	ING AND FINANCE
功思	A STATE OF	PERMIT (TEMPORARY)
al la	(See section	n 27 A) Permit No. 314FC / 2018-2019 (YC
and	2001	270 June 2019
	* The Minister of Blanning	LARC monomentation
		and Finance of the Government
	Republic of the Union of Myanmat in pu	
here	by grants a permit to the POWERGEN K	
Serence .		
of w	hich particulars are detailed below, to can	ry on its business within the Republic
the I	inion of Myanmar subject to the provisions c	
(1)	Name of the Company	Pow erGen Kyaukse Co., Ltd.
(2)	Country of incorporation	
	of the company.	The Republic of the Union of Myanmar
(3)	Location of the company's Head Office	No.36, Theinphyu Road, Pazundaung Towns
	and / or Principal Office in the Republic	Yangon, Myanmar.
	of the Union of Myanmar.	
(4)	The object for which the company	
	is formed (field of business).	Mentioned in back page.
(5)	(a) The amount of Capital and	
	the number of shares into	
	which the Capital is divided.	-US\$-1.000,000 divided into-1.000,000
<i>.</i>	(b) If more than one class of	shares of US\$ 1 each.
cts	shares is authorised, the	
	description of each class.	Only one class.
(6)	The names, addresses and	
1.614	nationality of the directors.	As per List attached.
(7)	The maximum amount of	As per conditions attached.
	indebtedness which may be	
	incurred by the company and	
	also a prohibition against	
	the contracting of debts	
	in excess of that amount.	June, 27, 2018 to
(8)	Period of validity of permit.	December, 26, 2018. (SIX MONTHS
191	a strong of running on permits	As per conditions attached.
(9)	Statement of compliance	a the factor of the state of th
0	with legal requirements for	
	A USA COMPANY AND A COMPANY A COMPANY	
	issue of Capital including	
	the amount to be paid in	The conditions attached to the permit
/105	before business is commenced.	and conditions as may be prescribed
(10)	A DESCRIPTION OF A DESC	from time to time are also to be strict
	with such conditions as	adhered to by the company.
	may be prescribed.	By order
		m
		1.00
		For Director General

The business objectives mentioned in the Memorandum of Association shall be allowed to : perform. If it is necessary, permit or license from relevant Union Ministries, Departments and Organizations of the Republic of the Union of Myanmar must be obtained in accordance with existing laws, rules and regulations. (a) Generating electricity -----(b) Distributing electricity (c) Service regarding with generation and distribution of electricity (d) Importation, storage and utilization of Liquified Petroleum Gas (LPG), fuel oil and any other energy products, etc for generation and distribution of electricity For Director General (Thet Paing- Deputy Director) ۰.

FORM XXVI

PARTICULARS OF DIRECTORS, MANAGERS AND MANAGING AGENTS AND OF ANY CHANGES THEREIN

(Myanmar Companies Act, See Section 87)

Name of Company : PowerGen Kyaukse Company Limited

Presented by J Maung Kyay

The Present Nationality, Christian name National or names of Registration surnames Card No.		Usual Residential Address	Other Business Occupation	Changes
l. U Maung Kyay	Myanmar 12/La The Na (N) 018174	No.(C/4),Mon Myat Myittar Residence, Pin Shwe Nyaung Street,Tamwe Kalay Ward,Tamwe Township,Yangon,Myanmar.	Merchant	
2. U Than Myint	Myanmar 12/La Ma Ta (N) 027772	No.45/A61/2miles,Pyay Road,Hlaing Township,Yangon,Myanmar.	Merchant:	
3, U Aung Hlaing Oo	Myanmar 12/La Ma Ta (N) 025897	No.1120-1121,Thu Mingalar Street,16/4 Ward,THingangyun Township,Yangon, Myanmar,	Merchant	
4. Daw Noe Noe Su Aung	Муалтаг 12/Tha Ga Kд (N) 185395	No.1120-1121.ThuMingalarStreet,16/4 Ward,Thingangyun Township,Yangon, Myanmar.	Merchant	
5. Mr.Zhang Yushi	Chinese Pessport No. <u>G</u> 49052786	No.882-1 Tong'an Road,Laoshan District Gingdao,China.	Merchant	

Signature

Designation Proposed Director

Dated this 27.6.2018

မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

ပါဝါဂျန် ကျောက်ဆည် ကုမ္ပဏီလီမိတက် ଚ୍ଚ သင်းဖွဲ့မှတ်တမ်း နှင့် သင်းဖွဲ့စည်းမျဉ်းများ

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THE MYANMAR COMPANIES ACT

PRIVATE COMPANY LIMITED BY SHARES

Memorandum Of Association

AND

Articles of Association

OF

# **POWERGEN KYAUKSE COMPANY LIMITED**

# မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

# ပါဝါဂျန် ကျောက်ဆည် ကုမ္ပဏီလီမိတက်

ଙ୍ଗା

သင်းဖွဲ့မှတ်တမ်း

## \*\*\* \*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

၁။ ကုမ္ပဏီ၏ အမည်သည် ပါဝါဂျန် ကျောက်ဆည် ကုမ္ပဏီလီမိတက် ဖြစ်ပါသည်။
 ၂။ ကုမ္ပဏီ၏ မှတ်ပုံတင်အလုပ်တိုက်သည် ပြည်ထောင်စုမြန်မာနိုင်ငံတော်အတွင်း တည်ရှိရမည်။
 ၃။ ကုမ္ပဏီတည်ထောင်ရခြင်း၏ ရည်ရွယ်ချက်များမှာ တစ်ဖက်စာမျက်နှာပါအတိုင်း ဖြစ်ပါသည်။
 ၄။ အစုဝင်များ၏ ပေးရန်တာဝန်ကို ကန့်ထားသည်။

၅။ ကုမ္ပဏီ၏ သတ်မှတ်မတည်ငွေရင်းသည် အမေရိကန်ဒေါ်လာ ၁,၀၀၀,၀၀၀,၀၀/-(အမေရိကန်ဒေါ်လာတစ်သန်းတိတိ) ဖြစ်၍ အမေရိကန်ဒေါ်လာ ၁,၀၀/- (အမေရိကန် ဒေါ်လာ တစ်ဒေါ်လာတိတိ) တန် အစုရှယ်ယာပေါင်း (၁,၀၀၀,၀၀၀) ခွဲထားပါသည်။ ကုမ္ပဏီ၏ ရင်းနှီးငွေကို ကုမ္ပဏီ၏ စည်းမျဉ်းများနှင့် လက်ရှိတရားဝင် တည်ဆဲဖြစ်နေသော တရားဥပဒေ ပြဌာန်းချက်များ နှင့်အညီ အထွေထွေသင်းလုံးကျွတ် အစည်းအဝေး၌ တိုးမြှင့်နိုင်ခွင့်၊ လျှော့ချနိုင်ခွင့်နှင့် ပြင်ဆင်နိုင်ခွင့် အာဏာ ရှိစေရမည်။

- ၆။ ကုမ္ပဏီတည်ထောင်ရခြင်း၏ ရည်ရွယ်ချက်များမှာ
  - လျှပ်စစ်ဓါတ်အားထုတ်လုပ်ခြင်း
  - လျှိပ်စစ်ဓါတ်အားဖြန့်ဖြူးရောင်းချခြင်း
  - လျှပ်စစ်ဓါတ်အားထုတ်လုပ်ခြင်းဖြန့်ဖြူးရောင်းချခြင်းနှင့်ဆိုင်သော
     ဝန်ဆောင်မှုလုပ်ငန်းများ
  - လျှပ်စစ်ဓာတ်အားထုတ်လုပ်ဖြန့်ဖြူးရောင်းချရန်အတွက် လိုအပ်သည့် ရေနံဓာတ်ငွေ့ ရည်၊ လောင်စာ နှင့် အခြားသောစွမ်းအင်ထုတ်ကုန်များ တင်သွင်းခြင်း၊ သိုလှောင် ခြင်းနှင့် သုံးစွဲခြင်း

၇။ ကုမ္ပဏီမှ သင့်တော်လျှောက်ပတ်သည်ဟု ယူဆပါက ကုမ္ပဏီ၏ စီးပွားရေးလုပ်ငန်းတွင် အကျိုးရှိ စေရန်အတွက် မည်သည့်ပုဂ္ဂိုလ်၊ စီးပွားရေးအဖွဲ့အစည်း၊ ကုမ္ပဏီ၊ ဘဏ် သို့မဟုတ် ငွေကြေးအဖွဲ့ အစည်းထံမှမဆို ငွေချေးယူရန်။

ခြွင်းချက်။ ကုမ္ပဏီသည် အထက်ဖော်ပြပါ ရည်ရွယ်ချက်များကို ပြည်ထောင်စုသမ္မတ မြန်မာနိုင်ငံ တော် အတွင်း၌ ဖြစ်စေ၊ အခြားမည်သည့်အရပ်ဒေသ၌ ဖြစ်စေ၊ အချိန်ကာလအလိုက် တည်မြဲ နေသော တရားဥပဒေများ၊ အမိန့်ကြော်ငြာစာများ၊ အမိန့်များက ခွင့်ပြုထားသည့် လုပ်ငန်းများမှအပ အခြား လုပ်ငန်းများကို လုပ်ကိုင်ဆောင်ရွက်ခြင်းမပြုပါ။ ထို့အပြင် ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော် အတွင်း၌ အချိန်ကာလအားလျော်စွာ တည်မြဲနေသည့် တရားဥပဒေ ပြဌာန်းချက်များ၊ အမိန့်ကြော်ငြာ စာများ၊ အမိန့်များနှင့် လျော်ညီသင့်တော်ခြင်း သို့မဟုတ် ခွင့်ပြုထားခြင်း ရှိမှသာလျှင် လုပ်ငန်းများကို ဆောင်ရွက်မည်ဟု ခြွင်းချက်ထားရှိပါသည်။ အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာခုံလင်စွာပါသော ဇယားတွင် လက်မှတ် ရေထိုးသူ ကျွန်ုပ်တို့ ကိုယ်စီကိုယ်ငှသည် ဤသင်းဖွဲ့မှတ်တမ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့် အလျှောက် ကျွန်ုပ်တို့၏ အမည်အသီးသီးနှင့် ယှဉ်တွဲရှိပြထားသော အစုရှယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည့်ဝင်ရယူကြရန် သဘောတူကြပါသည်။

| စဉ် | အစုထည့်ဝင်သူများ၏<br>အမည်၊ နေရပ်လိပ်စာနှင့် အလုပ်အကိုင်                                                                                                                                                                              | နိုင်ငံသားနှင့်<br>အမျိုးသား<br>မှတ်ပုံတင်အမှတ်                                                       | ဝယ်ယူသော<br>အစုရှယ်ယာ<br>ဦးဧရ | ထိုးမြဲလက်မှတ်                                      |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------|
| c   | ်နေရှင်နယ် အင်ဖရာစထရက်ချာ ဟိုးလ် ဒင်း(စ်)<br>ကုမ္ပဏီလီမိတက်<br>တမှတ် – ၃၆၊ သိမ်ဖြူလမ်း၊ ပုဇွန်တောင်မြို့နယ်၊<br>ရန်ကုန်တိုင်းဒေသကြီး။<br>ကိုယ်စားဖြုသူ့                                                                              | ကုမ္ပဏီမှတ်ပုံတင်အမှတ်<br>၅၅၁၇/၂၀၁၄ - ၂၀၁၅                                                            | റെ, ୦୦୦                       | $\mathbf{x}$                                        |
|     | ဦးမောင်ကျေး<br>(ကုန်သည်)<br>အမှတ်-စီ/၄၊မွန်မြတ်မေတ္တာ<br>အိမ်ရာ၊ပင်ရွှေညောင်လမ်း၊တာမွေမြို့နယ်၊                                                                                                                                      | ၁၂/လသန (နိုင်)<br>၀၁၈၁၇၄                                                                              |                               |                                                     |
|     | ရန်ကုန်တိုင်းခေသကြီး။<br>ဦးသန်းမြင့်<br>(ကုန်သည်)<br>အမှတ် - ၄၅/ဘေ၊ ၆မိုင်ခွဲ၊ ပြည်လမ်း၊<br>လှိုင်မြို့နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။                                                                                                    | ၁၂/လမတ (နိုင်)<br>၀၂၇၇၇၂                                                                              |                               | Char                                                |
| J   | မြန်မာဓာတုဗေဒနှင့်စက်ပစ္စည်းကုမ္ပဏီလီမိတတ်<br>ကိုယ်စားပြုသူ -<br>ဦးအောင်လှိုင်ဦး<br>(ကုန်သည်)<br>အမှတ်-၁၁၂၀-၁၁၂၁၊ သူမင်္ဂလာလမ်း၊ ၁၆/၄                                                                                                | ကုမ္ပဏီမှတ်ပုံတင်အမှတ်<br>၆၆၈/၂၀၀၁-၂၀၀၂<br>၁၂/လမတ (နိုင်)<br>၀၂၅၈၉၇                                   | ეე,ეიი                        | tagelle                                             |
|     | ရပ်ကွက်၊ သယ်န်းကျွန်းမြို့နယ်၊ ရန်ကုန်တိုင်းဒေ<br>သကြီး။<br>၁ေါ်နိုနိစုအောင်<br>(ကုန်သည်)<br>ဘမှတ်-၁၁၂ဝ-၁၁၂၁၊ သုမင်္ဂလာလမ်း၊ ၁၆/၄<br>ရပ်ကွက်၊ သယ်န်းကျွန်းမြို့နယ်၊ ရန်ကုန်တိုင်းဒေ<br>သကြီး။                                        | ၁၂/သဃက (နိုင်)<br>၁၈၅၃၉၅                                                                              | (                             | - Farthorn                                          |
| P   | SEPCOIII Electric Power Construction<br>Co.,Ltd<br>No.882-1 Tong'an Road, Laoshan<br>District, Qingdao, China.<br>Represented by<br>Mr. Zhang Yushi<br>(Businessman)<br>No. 882-1 Tong'an Road, Laoshan<br>District, Qingdao, China. | Incorporated in the<br>People Republic of<br>China<br>913702121654224203<br>Passport No.<br>G49052786 | əp,900                        | 262.F                                               |
| 'nα | ာsinci, Qingdao, China.<br>၇န်။ နေ့စွဲ၊ ၂၀၁၈ ခုနှစ်၊ ဇွန် လ၊ ၂၇<br>လက်ပါလက်မှတ်ရှင်များသည် ကျွန်ုပ်၏ ရှေ့မှောက်တွင်<br>မှတ်ရေးထိုးကြပါသည်။                                                                                           | ရက်။                                                                                                  |                               | ကျှာက တြင်<br>ပြတ်လိုးBA,RL<br>ဥတ်တော်ရှော့နေ [စဉ်ရ |

(२)

# မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

# ပါဝါဂျန် ကျောက်ဆည် ကုမ္ပဏီလီမိတက် <sub>၏</sub>

သင်းဖွဲ့စည်းမျဉ်းများ

 $\bullet^{\bullet}_{\bullet} \bullet \ \bullet^{\bullet}_{\bullet} \bullet \$ 

၁။ ဤသင်းဖွဲ့စည်းမျဉ်းနှင့် လိုက်လျောညီထွေမဖြစ်သည့် စည်းမျဉ်းများမှအပ၊ မြန်မာနိုင်ငံ ကုမ္ပဏီများအက်ဥပဒေ နောက်ဆက်တွဲပထမဇယားပုံစံ -- 'က' ပါ စည်းမျဉ်းများသည် ဤကုမ္ပဏီနှင့် သက်ဆိုင်စေရမည်။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေပုဒ်မ ၁၇ (၂) တွင် ဖော်ပြပါရှိသည့် မလိုက်နာမနေရ စည်းမျဉ်းများသည် ဤကုမ္ပဏီနှင့် အစဉ်သဖြင့် သက်ဆိုင်စေရမည်။

# အများနှင့် မသက်ဆိုင်သော ကုမ္ပဏီ

၂။ ဤကုမ္ပဏီသည် အများနှင့်မသက်ဆိုင်သည့်ကုမ္ပဏီဖြစ်၍ အောက်ပါသတ်မှတ်ချက်များသည် အကျိုး သက်ရောက်စေရမည်။

(က) ဤကုမ္ပဏီက ခန့်အပ်ထားသော ဝန်ထမ်းများမှအပ ဤကုမ္ပဏီ၏ အစုရှင်အရေအတွက်ကို ငါးဆယ်အထိသာ ကန့်သတ်ထားသည်။

(ခ) ဤကုမ္ပဏီ၏ အစုရှယ်ယာသို့မဟုတ် ဒီဘင်ချာစတော့(ခ်) တစ်ခုခုအတွက် ငွေထည့်ဝင်ရန် အများပြည်သူတို့အား ကမ်းလှမ်းခြင်းမပြုလုပ်ရန် တားမြစ် ထားသည်။

# မတည်ရင်းနှီးငွေနှင့် အစုရှယ်ယာ

- ၃။ ကုမ္ပဏီ၏ သတိမှတ်မတည်ငွေရင်းမှာ အမေရိကန်ဒေါ်လာ ၁,၀၀၀,၀၀၀ .၀၀/- (အမေရိကန် ဒေါ်လာ တစ်သန်း တိတိ) ဖြစ်၍ အမေရိကန်ဒေါ်လာ ၁.၀၀/- (အမေရိကန်ဒေါ်လာ တစ်ဒေါ်လာ တိတိ) တန် အစုရှယ်ယာပေါင်း (၁,၀၀၀,၀၀၀) ခွဲထားပါသည်။ ကုမ္ပဏီ၏ရင်းနှီးငွေကို ကုမ္ပဏီ၏ စည်းမျဉ်းများနှင့် လက်ရှိတရားဝင် တည်ဆဲဖြစ်နေ သော တရားဥပဒေ ပြဌာန်းချက်များနှင့်အညီ အထွေထွေသင်းလုံးကျွတ် အစည်းအဝေး၌ တိုးမြှင့်နိုင်ခွင့်၊ လျှော့ချနိုင်ခွင့်နှင့် ပြင်ဆင်နိုင်ခွင့် အာဏာရှိစေရမည်။
- ၄။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေပါ ပြဌာန်းချက်များကို မထိခိုက်စေလျက် အစုရှယ်ယာ များသည် ဒါရိုက်တာများ၏ ကြီးကြပ်ကွပ်ကဲမှု အောက်တွင်ရှိစေရမည်။ ၄င်းဒါရိုက်တာများသည် သင့်လျော်သော ပုဂ္ဂိုလ်များအား သတ်မှတ်ချက် အခြေအနေ တစ်စုံတစ်ရာဖြင့် အစုရှယ်ယာများကို ခွဲဝေချထားခြင်း သို့မဟုတ် ထုခွဲရောင်းချခြင်းတို့ကို ဆောင်ရွက်နိုင်သည်။

- ၅။ အစုရှယ်ယာလက်မှတ်များကို အထွေထွေမန်နေဂျာ သို့မဟုတ် ဒါရိုက်တာအဖွဲ့က သတ်မှတ်သည့် အခြား ပုဂ္ဂိုလ်များက လက်မှတ်ရေးထိုး၍ ကုမ္ပဏီ၏ တံဆိပ်ရိုက်နှိပ် ထုတ်ပေးရမည်။ အစုရှယ်ယာ လက်မှတ်သည် ပုံပန်းပျက်ခြင်း၊ ပျောက်ဆုံးခြင်း သို့မဟုတ် ပျက်စီးခြင်းဖြစ်ပါက အဖိုးအခဖြင့် ပြန်လည်အသစ်ပြုလုပ်ပေးမှုကို သော်လည်းကောင်း၊ ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆသော အခြားသက်သေခံ အထောက်အထား တစ်စုံတစ်ရာကို တင်ပြစေ၍သော်လည်းကောင်း ထုတ်ပေးနိုင်သည်။ ကွယ်လွန်သွားသော အစုရှယ်ယာရှင် တစ်ဦး၏ တရားဝင်ကိုယ်စားလှယ်ကို ဒါရိုက်တာများက အသိအမှတ် ပြုပေးရမည်ဖြစ်သည်။
- ၆။ ဒါရိုက်တာများသည် အစုရှင်များက ၄င်းတို့၏ အစုရှယ်ယာများအတွက် မပေးသွင်းရသေးသော ငွေများကို အခါအားလျော်စွာ တောင်းဆိုနိုင်သည်။ အစုရှင်တိုင်းကလည်း ၄င်းတို့ထံ တောင်းဆိုသည့် အကြိမ်တိုင်းအတွက် ဒါရိုက်တာများက သတ်မှတ်သည့် ပုဂ္ဂိုလ်များထံ သတ်မှတ်သည့်အချိန်နှင့် နေရာတွင် ပေးသွင်းစေရန် တာဝန်ရှိစေရမည်။ ဆင့်ခေါ်မှုတစ်ခု အတွက် အရစ်ကျပေးသွင်းစေခြင်း၊ သို့မဟုတ် ပယ်ဖျက်ခြင်း သို့မဟုတ် ရွှေ့ဆိုင်းခြင်းတို့ကို ဒါရိုက်တာများက သတ်မှတ်နိုင်သည်။

### ဒါရိုက်တာများ

- ၇။ သင်းလုံးကျွတ် အစည်းအဝေးက တစ်စုံတစ်ရာ သတ်မှတ်ပြဌာန်းမှု မပြုလုပ်သမျှ ဒါရိုက်တာများ၏ အရေအတွက်သည် ( ၆ )ဦး ထက်မနည်း၊ ( ၂၀ )ဦးထက်မများစေရ။ ပထမဒါရိုက်တာများသည် —
  - (၁) ဦးမောင်ကျေး
  - (၂) ဦးသန်းမြင့်
  - (၃) ဦးအောင်လှိုင်ဦး
  - (၄) ဒေါ်နိုနိုစုအောင်
  - (
    ) Mr. Zhang Yushi
- ၈။ ဒါရိုက်တာများသည် ၄င်းတို့အနက်မှတစ်ဦးကို မန်နေဂျင်းဒါရိုက်တာအဖြစ် အချိန်အခါအလိုက် သင့်လျော်သော သတ်မှတ်ချက်များ၊ ဉာဏ်ပူဇော်ခများဖြင့် ခန့်ထားရမည်ဖြစ်ပြီး အခါအားလျော်စွာ ဒါရိုက်တာအဖွဲ့က ပေးအပ်သော အာဏာများအားလုံးကို ၄င်းက အသုံးပြုနိုင်သည်။
- ၉။ ဒါရိုက်တာတစ်ဦးဖြစ်မြောက်ရန် လိုအပ်သော <mark>အရည်အချင်း</mark>သည် ကုမ္ပဏီ၏ အစုရှယ်ယာ အနည်းဆုံး ( )စု ကိုပိုင်ဆိုင်ခြင်းဖြစ်၍ ၄င်းသည် မြန်မာနိုင်ငံ ကုမ္ပဏီအက်ဥပဒေပုဒ်မ ၈၅ ပါ ပြဌာန်းချက် များကို လိုက်နာရန် တာဝန်ရှိသည်။
- ၁၀။ အစုရှယ်ယာများ လွှဲပြောင်းရန် တင်ပြချက်ကို မည်သည့် အကြောင်းပြချက်မျှ မပေးဘဲ ဒါရိုက်တာ အဖွဲ့သည် ၄င်းတို့၏ပြည်စုံ၍ ချုပ်ချယ်ခြင်းကင်းသော ဆင်ခြင်တွက်ဆမှုဖြင့် မှတ်ပုံတင်ရန် ြင်းဆိုနိုင်သည်။

### ဒါရိုက်တာများ၏ ဆောင်ရွက်ချက်များ

- ၁၁။ ဒါရိုက်တာများသည် ၄င်းတို့သင့်လျော်သည် ထင်မြင်သည့်အတိုင်း လုပ်ငန်းဆောင်ရွက်ရန် တွေ့ဆုံ ဆွေးနွေးခြင်း၊ အစည်းအဝေးရွေ့ဆိုင်းခြင်း၊ အချိန်မှန်စည်းဝေးခြင်း၊ အစည်းအဝေးအထမြောက်ရန် အနည်းဆုံး ဒါရိုက်တာဦးရေ သတ်မှတ်ခြင်းတို့ကို ဆောင်ရွက်နိုင်သည်။ ယင်းသို့ မသတ်မှတ်ပါက ဒါရိုက်တာနှစ်ဦး တက်ရောက်လျှင် အစည်းအဝေးထမြောက်ရမည်။ အစည်းအဝေးတွင် မည်သည့်ပြသနာမဆို ပေါ် ပေါက်ပါက မန်နေးဂျင်းဒါရိုက်တာ၏ အဆုံးအဖြတ်သည် အတည်ဖြစ်ရမည်။ မည်သည့် ကိစ္စများကိုမဆို မဲခွဲဆုံးဖြတ်ရာတွင် မဲအရေအတွက်တူနေပါက သဘာပတိသည် ဒုတိယမဲ သို့မဟုတ် အနိုင်မဲကို ပေးနိုင်သည်။
- ၁၂။ ဒါရိုက်တာများ၏ အစည်းအဝေးကို မည်သည့်ဒါရိုက်တာကမဆို အချိန်မရွေး ခေါ်နိုင်သည်။

၁၃။ ဒါရိုက်တာအားလုံးက လက်မှတ်ရေးထိုးထားသော ရေးသားထားသည့်ဆုံးဖြစ်ချက် တစ်ရပ်သည် နည်းလမ်းတကျ ခေါ်ယူကျင်းပသော အစည်းအဝေးက အတည်ပြုသည့် ဆုံးဖြတ်ချက်ကဲ့သို့ပင် ကိစ္စအားလုံးအတွက် အကျိုးသက် ရောက်စေရမည်။

## ဒါရိုက်တာများ၏ လုပ်ပိုင်ခွင့်နှင့်တာဝန်များ

- ၁၄။ မြန်မာနိုင်ငံ ကုမ္ပဏီများအက်ဥပဒေ နောက်ဆက်တွဲဇယားပုံစံ(က)ပါ စည်းမျဉ်းအပိုဒ် ဂု၁ တွင် ပေးအပ်ထားသော အထွေထွေ အာဏာများကို မထိခိုက်စေဘဲ ဒါရိုက်တာများသည် အောက်ဖော်ဖြပါ အာဏာများ ရှိရမည်ဟု အတိအလင်း ထုတ်ဖော်ကြေညာသည်၊ အာဏာဆိုသည်မှာ –
  - (၁) ဒါရိုက်တာများက သင့်လျော်သည်ဟုယူဆသော တန်ဖိုးနှင့်စည်းကမ်းများ၊ အခြေအနေများ သတ်မှတ်၍ ကုမ္ပကီကရယူရန် အာကာရှိသည့် မည်သည့်ပစ္စည်း၊ အခွင့်အရေးများ၊ အခွင့်အလမ်းများကိုမဆို ဝယ်ယူရန် သို့မဟုတ် အရြာနည်းလမ်းများဖြင့် ရယူဝိုင်ဆိုင်ရန်အပြင် ကုမ္ပကီက ဝိုင်ဆိုင်ခွင့်ရှိသော မည်သည့်ပစ္စည်း၊ အခွင့်အရေးများ၊ အခွင့်အလမ်းများကိုမဆို သင့်တော်သောစည်းကမ်းချက်များ သတ်မှတ်၍ရောင်းချခြင်း၊ အငှားချခြင်း၊ ခွန့်လွှတ်ခြင်း၊ သို့မဟုတ်အမြားနည်းလမ်းများဖြင့် ဆောင်ရွက်ခြင်းတို့ကိုပြုလုပ်ရန်။
  - သင့်လျော်သော စည်းကမ်းသတ်မှတ်ချက်များဖြင့် စငွကြေးများကို ရေးငှားရန် သို့မဟုတ် အဆိုပါရေးငှားသော ငွေကြေးများကို ပြန်လည်ပေးဆပ်ရန်အတွက် အာမစံများထားရှိရန်အပြင်၊ အထူးသဖြင့် ဤကုမ္ပကီ၏ ဒီဘင်ရာများ၊ ဒီဘင်ရာစတော့ (စ်)များ၊ စေါ်ယူခြင်းမပြုရသေးသော ရင်းနှီးငွေများအပါအဝင် ယခုလက်ရှိနှင့် နောင်ရှိမည့် ပစ္စည်းများအားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကိုအပေါင်ပြု၍ ထုတ်ဝေရန်း
  - (၃) ဤကုမ္ပကီ ရယူထားသော အစွင့်အရေးများ သို့မဟုတ် ဝန်ဆောင်မှုများအတွက် အားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို ငွေကြေးအားဖြင့် ပေးရေရန်း သို့မဟုတ် အစုရှယ်ယာများ၊ ငွေရေးစာချုဝ်များ၊ ဒီဘင်ရာများ သို့မဟုတ် ဤကုမ္ပကိ၏ အခြားသော အာမစံစာချုပ်များကို ထုတ်ပေးရန်၊ ထို့အပြင် အဆိုပါ အစုရှယ်ယာများထုတ်ပေးရာ၌ ငွေအပြည့်ပေးသွင်းပြီးသော အစုရှယ်ယာအနေဖြင့် သော်လည်းကောင်း၊ တစ်စိတ်တစ်ဒေသ ပေးသွင်းပြီးသော အစုရှယ်ယာများ အနေဖြင့်သော်လည်းကောင်း သဘောတူညီသကဲ့သို့ ထုတ်ဝေပေးရန်နှင့် အဆိုပါ ငွေရေးစာချုပ်များ၊ ဒီဘင်ရာများ သို့မဟုတ် ကုမ္ပကီ၏ အခြားသောအာမခံ စာချုပ်များဖြင့် ထုတ်ဝေပေးရာ၌ ခေါ်ဆိုခြင်း မပြုံရသေးသော ရင်းနီးငွေများ အပါဝင် ဤကုမ္ပကီ၏ ပစ္စည်းအားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို အပေါင်ပြု၍ဖြစ်စေ ထိုကဲ့သို့ မဟုတ်ဘဲဖြစ်စေ ထုတ်ပေးရန်း
  - (၄) ဤကုမ္ပဏီနှင့် ပြုလုပ်ထားသော ကန်ထရိုက်စာရှုပ်များ၊ တာဝန်ယူထားသည့်လုပ်ငန်းများ ပြီးစီးအောင် ဆောင်ရွက်စေခြင်း အလို့ငှာခေါ်ယူခြင်း မပြုရသေးသော ရင်နီးငွေများ အပါအဝင် ဤကုမ္ပဏီ၏ ပစ္စည်းရပ်များ အားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို ပေါင်နံ၍ သော်လည်ကောင်း၊ အပေါင်ပြု၍သော်လည်းကောင်း သို့မဟုတ် အစုရှယ်ယာများအတွက် ငွေများ တောင်းခံခေါ်ယူ၍သော်လည်းကောင်း ခွင့်ပြုရန် သို့မဟုတ် သင့်လျော်သည့်အတိုင်းဆောင်ရွက်ရန်း
  - (၅) မန်နေဂျာများ၊ အတွင်းရေးမှူများ၊ အရာရှီများ၊ စာရေးများ၊ ကိုယ်စားလှယ်များနှင့် ဝန်ထမ်းများကို အမြဲတမ်း၊ ယာယီ သို့မဟုတ် အထူးကိစ္စရပ်များအတွက်ခန့်ထားခြင်း၊ ရပ်စဲခြင်း၊ ဆိုင်းငံ့ခြင်းများအတွက် လည်းကောင်း အဆိုပါ ပုဂ္ဂိုလ်တို့၏ တာဝန်များ၊ အာကာများ၊ လစာငွေများ၊ အခြားငွေကြေးများကို သတ်မှတ်ရာ၌လည်းကောင်း၊ အာမစံပစ္စည်းများ တောင်းခံရာ၌လည်းကောင်း သင့်လျော်သလိုဆောင်ရွက်ရန်၊ ထို့အပြင် အဆိုပါကိစ္စရပ်များအတွက် ကုမ္ပဏီ၏ မည်သည့်အရာရှိကိုမဆို ကိစ္စရပ်အားလုံးကိုဖြစ်စေ၊ တစ်စိတ် တစ်ဒေသကိုဖြစ်စေ ဒါရိုက်တာများ၏ကိုယ်စားဆောင်ရွက်နိုင်ရေးအတွက် တာဝန်လွှဲအပ်ရန်။
  - (၆) ဤကုမ္ပါကီ၏ ဒါရိုက်တာတစ်ဦးအား ဒါရိုက်တာရာထူးနှင့် တွဲဖက်၍ မန်နေဂျင်း ဒါရိုက်တာ၊ အထွေထွေ မန်နေဂျာ၊ အတွင်းရေးမှူး သို့မဟုတ် ဌာနခွဲ မန်နေဂျာအဖြစ်ခန့်ထားရန်း
  - (၇) မည်သည့် အစုရှင်ထံမှမဆို ၄င်းတို့၏ အစုရှယ်ယာများအားလုံးကိုဖြစ်စေ၊ အချို့အဝက်ကိုဖြစ်စေ စွန့်လွှတ်ခြင်းအား
     သဘောတူညီသော စည်းကမ်းများဖြင့် လက်ခံရန်၊

- (၈) ဤကုမ္ပကီက ပိုင်ဆိုင်သော သို့မဟုတ် ပိုင်ဆိုင်ခွင့်ရှိသော သို့မဟုတ် အခြားအကြောင်းများကြောင့် ဖြစ်သော မည်သည့် ပစ္စည်းကိုမဆို ကုမ္ပကီ၏ကိုယ်စား လက်ခံထိန်းသိမ်းထားရန်အတွက် မည်သည့်ပုဂ္ဂိုလ် သို့မဟုတ် ပုဂ္ဂိုလ်များကိုမဆို ခန့်ထားရန်နှင့် အဆိုပါ ယုံမှတ် အပ်နံခြင်းများနှင့် ပတ်သက်၍ လိုအပ်သော စာချုပ်စာတမ်းများ ချုပ်ဆို ပြုလုပ်ရန်။
- (၉) ဤကုမ္ပကီ၏ အရေးအရာများနှင့် စပ်လျဉ်း၍ ဤကုမ္ပကီက ပြုလုပ်သော သို့မဟုတ် ဤကုမ္ပကီအပေါ် သို့မဟုတ် ဤကုမ္ပကီ၏ အရာရှိများအပေါ် ပြုလုပ်သော တရားဥပဒေအရ စွဲဆို ဆောင်ရွက်မှုများကို တရားစွဲဆို၊ အရေးယူ၊ ခုစံကာကွယ်ရန် သို့မဟုတ် ခွင့်လွှတ်ရန်၊ ထို့အပြင် ဤကုမ္ပကီက ရရန်ရှိသော ကြွေးမြီများနှင့် ဤကုမ္ပကီအပေါ် တောင်းစံသော ကြွေးမြီများနှင့်ပတ်သက်၍ ပေးဆပ်ရန် အချိန်ကာလ ရွှေ့ဆိုင်းခွင့်ပြုခြင်၊ သို့မဟုတ် နှစ်ဦးနှစ်ဖက် သဘောတူ ကျေအေးခြင်းများ ပြုလုပ်ရန်။
- (၁၀) ဤကုမ္ပကီက ပေးရန်ရှိသော သို့မဟုတ် ရရန်ရှိသော ငွေတောင်းခံခြင်းများကို ဖြန်ဖြေရေး ခုံသမာဓိထံသို့ ဖြေရှင်းရန်အတွက် အပ်နံရန်အပြင် ဖြန်ဖြေရေး ခုံသမာဓိ၏ ဆုံးဖြတ်ချက်အတိုင်းလိုက်နာဆောင်ရွက်ရန်။
- (၁၁) ဤကုမ္ပဏီက ရရန်ရှိသောတောင်းဆိုစျက်၊ တောင်းခံချက်များနှင့် ကုမ္ပဏီသို့ပေးရန်ရှိသော ငွေကြေးများ အတွက်ပြေစာများပြုလုပ်ထုတ်ပေးခြင်။ လျှော်ပစ်ခြင်းနှင့်အခြားသောနည်းဖြင့်စွန့်လွှတ်ခြင်းများကိုပြုလုပ်ရန်။
- (၁၂) လူမွဲစာရင်းခံရခြင်း၊ ကြွေးမြီး မဆက်နိုင်ခြင်းကိစ္စများနှင့် ပတ်သက်၍ ကုမ္ပဏီအိုကိုယ်စား ဆောင်ရွက်ရန်။
- (၁၃) ငွေလွှဲစာတမ်းများ၊ ချက်လက်မှတ်များ၊ ဝန်ခံကတိစာချုပ်များ ထပ်ဆင့်လက်မှတ်ရေးထိုးခြင်းများ၊ လျှော်ပစ်ခြင်းများ၊ ကန်ထရိုက် စာချုပ်များနှင့်စာရွက်စာတမ်းများကို ကုမ္ပဏီ၏ ကိုယ်စားမည်သူက လက်မှတ် ရေးထိုးဒွင့်ရှိသည်ကို စိစစ်သတ်မှတ်ရန်၊
- (၁၄) ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆပါက သင့်လျော်လျှောက်ပတ်သောနည်းလမ်းများဖြင့် လတ်တလော အသုံးပြုရန် မလိုသေးသော ကုမ္ပကီပိုင် ငွေများကို အာမခံပစ္စည်း ပါသည်ဖြစ်စေ၊ မပါသည်ဖြစ်စေ ရင်နီးမြှုပ်နံ ထားရန်နှင့် စီမံခန့်ခွဲထားရန်၊ ထို့အပြင် အချိန်ကာလအားလျော်စွာ မြှုပ်နံထားသောငွေကို ပြန်လည်ရယူရန်နှင့် ပြင်ဆင်ပြောင်းလွှဲရန်။
- (၁၅) ဤကုမ္ပကီ၏ အကျိုးအတွက် ငွေကြေးစိုက်ထုတ် ကုန်ကျစံထားသော ဒါရိုက်တာ သို့မဟုတ် အခြား မုဂ္ဂိုလ်များက ကုမ္ပကီ၏ (လက်ရှိနှင့် နောင်တွင်ရှိမည့်)ပစ္စည်းများကို ဤကုမ္ပကီ၏ အမည်ဖြင့်ဖြစ်စေ၊ ဤကုမ္ပကီ၏ ကိုယ်စားဖြစ်စေ ပေါင်နံဖြင်းကို သင့်လျော်သည်ဟု ယူဆပါက ဆောင်ရွက်စွင့်ပြုရန်။ အဆိုပါ ပေါင်နံဖြင်းဆိုရာ၌ ရောင်းချနိုင်သည့် အာဏာနှင့် အခြားသော သဘောတူညီထားသည့် တရားဝင်သဘော တူညီချက်များနှင့် ဥပဒေပြဌာန်းချက်များပါ ပါဝင်သည်။
- (၁၆) ဤကုမ္ပၸိကာခန့်အပ်ထားသောမည်သည့်အရာရှိသို့မဟုတ်ပုဂ္ဂိုလ်ကိုမဆိုအတိအကျဆောင်ရွက်ခဲ့သည့်လုပ်ငန်း သို့မဟုတ် ဆောင်ရွက်မှုတစ်ခုအတွက် ရရှိသောအမြတ်ငွေမှ ကော်မရှင်ပေးခြင်း သို့မဟုတ် ကုမ္ပဏီ၏အဝေွတွေ အမြတ်အစွန်းမှ ခွဲဝေပေးခြင်းများပြုလုပ်ရန်နှင့် အဆိုပါကော်မရှင်များ အမြတ်များခွဲဝေပေးခြင်း စသည်တို့ကို ဤကုမ္ပဏီ၏ လုပ်ငန်းကုန်ကျစရိတ် တစ်စိတ်တစ်ဒေသအဖြစ် သတ်မှတ်ရန်။
- (၁၇) ဤကုမ္ပကီ၏ လုပ်ငန်းများ၊ အရာရှိများ ဝန်ထမ်းများနှင့် အစုရှင်များအတွက် ထုတ်ပြန်ထားသော စည်းမျဉ်းများ၊ စည်းကမ်းရျက်များ၊ စည်းကမ်းဥပဒေများကို အခါအားလျော်စွာ သတ်မှတ်ခြင်း၊ ပြင်ဆင်ခြင်း၊ ဖြည့်စွက်ခြင်းများ ဆောင်ရွက်ရန်။
- (၁၈) ဤကုမ္ပဏီ၏ လုပ်ငန်းအတွက် ဤကုမ္ပဏီ၏ အမည်ဖြင့်ဖြစ်စေ၊ ဤကုမ္ပဏီ၏ ကိုယ်စားဖြစ်စေ လိုအပ်သည်ဟု ယူဆလျှင် ညှိနှိုင်းဆွေးနွေးရြင်းနှင့် ကန်ထရီက်စာချုပ် ချုပ်ဆိုခြင်းများကို ပြုလုပ်ရန်၊ ဖျက်သိမ်းရန်နှင့် ပြင်ဆင်ရန်အပြင် အဆိုပါ ဆောင်ရွက်ရျက် စာချုပ်များနှင့် ကိစ္စရပ်များကိုလည်းကောင်း ၄င်းတို့နှင့် စပ်လျဉ်းသော ကိစ္စရပ်များကို လည်းကောင်း လုပ်ကိုင်ဆောင်ရွက်ရန်။
- (၁၉) ဒါရိုက်တာများက သင့်လျော်လျှောက်ပတ်သည်ဟု ယူစာပါက ကုမ္ပကီ၏ စီးပွားရေးလုပ်ငန်းတွင် အကျိုးရှိ စေရန်အတွက် မည်သည့်ပြည်တွင်းပြည်ပ မုဝ္ဂိုလ်၊ စီးပွားရေး အဖွဲ့အစည်း၊ ကုမ္ပကီ သို့မဟုတ် ဘက် သို့မဟုတ် ဝင္ငကြေးအဖွဲ့အစည်းထံမှ မဆို ငွေရေးယူရန်။

### အထွေထွေအစည်းဝေးကြီးများ

၁၅။

ကုမ္ပကီကိုဥပဒေအရ ဖွဲ့စည်းတည်ထောင်ပြီးသည့်နေ့မှ တစ်ဆယ့်ရှစ်လအတွင်း အထွေထွေသင်းလုံးကျွတ် အစည်း အဝေးကြီး ကိုကျင်းပရမည်။ ထို့နောက် ဒါရိုက်တာအဖွဲ့က သတ်မှတ်ပေးသည့် အချိန်နှင့် နေရာများတွင် ပြက္ခဒိန်နှစ် တစ်နှစ်လျှင် အနည်းဆုံးတစ်ကြိမ် (နောက်ဆုံးကျင်းပသည့် အထွေထွေအစည်းဝေးကြီးနှင့်တစ်ဆယ့်ငါးလတက်မပိုသည့် အရိန်၌)ကျင်းပရမည်။ သင်းလုံးကျွတ် အစည်းအဝေးစတင်၍ လုပ်ငန်းအတွက် ဆွေးနွေးရှိန်တွင် အစည်းအဝေး အထမြောက်ရန် သတ်မှတ်သည့်အစုရှင်အရေအတွက် မတတ်ရောက်သော မည်သည့်သင်းလုံးကျွတ် အစည်းအဝေးတွင် မဆို လုပ်ငန်းနှင့် ပတ်သက်၍ ဆုံးဖြတ်<del>ထောင်ရွက်</del>ခြင်းမပြုရ။ ဤတွင်အမြားနည်း သတ်မှတ်ပြဌာန်းခြင်းမရှိလျှင် ထုတ်ဝေထားသည့် မ,တည် ရင်းနှီးငွေ အစုရှယ်ယာများ၏ ငါးဆယ်ရာခိုင်နှန်းထက်မနည်း ပိုင်ဆိုင်ကြသည့် (နှစ်ဦး ထက်မနည်းသော ) အစုရှင်များ ကိုယ်တိုင်တတ်ရောက်လျှင် လုပ်ငန်းကိစ္စအားလုံး ထောင်ရွက်ရန်အတွက် အစည်းအဝေး အထမြောက်သည့်ဦးရေ ဖြစ်သည်။ အကယ်၍ ကုမ္မကီတွင် အစုရှင်အရေအတွက် နှစ်ဦးတည်းသာရှိသည့် ကိစ္စတွင်မူ ထိုနှစ်ဦးတည်းသည်ပင်လျှင်အစည်းအဝေ၊ အထမြောက်ရန် သတ်မှတ်သည့် အရေတွက်ဖြစ် စေမည်။

## အမြတ်ဝေစုများ

၁၆။ သင်းလုံးကျွတ်အစည်းအဝေးတွင် ဤကုမ္ပကီ၏ အစုရှင်များအားခွဲဝေပေးမည့် အမြတ်ဝေစုကို ကြေညာရမည်။ သို့ရာတွင် အမြတ်ဝေစုသည် ဒါရိုက်တာများက ထောက်စံ<mark>သော ဓင္</mark>ငပမာဏထက် မကျော်လွန်စေရ။ သက်ဆိုင်ရာနစ်၏အမြတ်ပမာဏ သို့မဟုတ် အခြားမခွဲဝေရသေးသည့် အမြတ်ပမာဏမှအပ အမြတ်ဝေစုကို ခွဲဝေမပေးရ။

## ရံးဝန်ထမ်းများ

၁၇။ ကုမ္ပကီသည် လုပ်ငန်းရုံးတစ်ခုကို ဖွင့်လှစ်၍ စစာာင်ရွက်မည်ဖြစ်ပြီး အရည်အချင်း ပြည့်မီသူပုဂ္ဂိုလ်တစ်ဦးအား အထွေထွေမန်နေဂျာအဖြစ် ခန့်အပ်ရန်နှင့် အခြားအရည်အချင်း ပြည့်မီသူများအား ရုံးဝန်ထမ်းများအဖြစ် ခန့်အပ်မည် ဖြစ်သည်။ လတ၊ ခရီးသွားလာစရိတ်နှင့် အခြားအသုံးစရိတ်များကဲ့သို့သော ဉာက်ပူစော်များနှင့် အခေကြးငွေ များကို ဒါရိုက်တာအဖွဲ့က သတ်မှတ်မည်ဖြစ်ပြီး ၄င်းသတ်မှတ်ချက်များကို သင်းလုံးကျွတ် အစည်းအဝေးက အတည်ပြုရမည်။ အထွေထွေမန်နေဂျာသည် လုပ်ငန်းရုံး၏ ထိရောက်စွာလုပ်ငန်း လည်ပတ်မှုအားလုံးအတွက် တာဝန်ရှိစေရမည်ဖြစ်ပြီး မန်နေးဂျင်းဒါရိုက်တာအားတာဝန်ခံ၍ ဆောင်ရွက်ရမည်။

#### ငွေစာရင်းများ

- ၁၈။ ဒါရိုက်တာများသည် သင့်လျော်သည့် ငွေ<mark>စာရင်းစာအုပ်များကို</mark> အောက်ဖော်ပြပါ သတ်မှတ်ချက်များနှင့်အညီ ထားသို ထိန်းသိမ်းဆောင်ရွက်ရမည်။
  - (၁) ကုမ္ပဏီ၏ ရငွေ၊ သုံးငွေများ၏ ပမာဏနှင့် ၄င်းရငွေ၊ သုံးငွေများဖြစ်ပေါ်ခြင်းနှင့် စပ်လျဉ်းသည့် အကြောင်း ကိစ္စများ။
  - (၂) ကုမ္ပဏီ၏ကုန်ပစ္စည်းများရောင်းရခြင်းနှင့် ဝယ်ယူခြင်းများ။
  - (၃) ဤကုမ္ပဏီ၏ ရရန်ပိုင်ခွင့်နှင့် ပေးရန်ဘာဝန်များ။
- ာ၆။
- ငွေစာရင်းစာအုပ်အားလုံးကို ဤကုမ္ပကီ၏ မှတ်ပုံတင်ထားသော လုပ်ငန်းရုံး သို့မဟုတ် ဒါရိုက်တာများကသင့်လျှော် သည်ဟုထင်မြင်ယူဆသော အခြားနေရာတွင် သိမ်းဆည်းထားရမည်ဖြစ်ပြီး၊ ရုံးချိန်အတွင်း၌ ဒါရိုက်တာများက - စစ်ဆေးနိုင်ရန်ပြသထားရမည်။

## စာရင်းစစ်

၂၀။ စာရင်းစစ်များကို ခန့်အပ်ထားရမည်။ ၄င်းစာရင်းစစ်များ၏ တာဝန်သည် မြန်မာနိုင်ငံ ကုမ္ပကီများ အက်ဥပဒေ သို့မဟုတ် အခါအားလျော်စွာပြင်ဆင်သတ်မှတ်သည့်စည်းမျဉ်းစည်းကမ်းများနှင့် လိုက်လျောညီထွေဖြစ်ရမည်။

## နိုတစ်စာ

၂၁။ ဤကုမ္ပကီသည် မည်သည့်အစုရှင်ထံသို့မဆို နို့တစ်စာကို လက်ရောက်ပေးအပ်ခြင်း သို့မဟုတ် နို့တစ်စာပါသော စာကို စာတိုက်စ ကြိုတင်ပေးထား၍ ၄င်းအစုရှင်ထံ မှတ်ပုံတင်လိပ်စာအတိုင်း စာတိုက်မှတစ်ဆင့် လိပ်မူပေးပို့ခြင်းအားဖြင့် ပေးပို့နိုင်သည်။

## တံဆိပ်

၂၂။ ခါရိုက်တာများသည် တံဆိပ်ကို လုံခြုံစွာထိန်းသိမ်းထားရန်အတွက် စီမံဆောင်ရွက်ရမည်။ ထိုတံဆိပ်ကို ဒါရိုက်တာများက ကြိုတင်ပေးအပ်ထားသည့် နွင့်ပြုချက်ဖြင့်မှတစ်ပါး၊ ထို့အပြင် အနည်းဆုံး ဒါရိုက်တာတစ်ဦး ရှေ့မှောက်တွင်မှ တစ်ပါး မည်သည့် အခါမျှမသုံးရ။ တံဆိပ်ရိုက်နှိပ်ထားသည့် စာရွက်စာတမ်းတိုင်းတွင် ထိုဒါရိုက်တာက လက်မှတ်ရေးထိုးရမည်။

## လျော်ကြေး

၂၃။ မြန်မာနိုင်ငံကုမ္ပကီများ အက်ဥပဒေ ပုဒ်မ ၈၆ (n) တွင် ဖော်ပြပါရှိသည့် ပြဌာန်းချက်များ၊ လက်ရှိတရားဝင်တည်ဆဲ ဥပဒေပြဌာန်းချက်များနှင့် မဆန့်ကျင်စေဘဲ ကုမ္ပကီ၏ ဒါရိုက်တာ၊ စာရင်းစစ်၊ အတွင်းရေးမှူး သို့မဟုတ် အခြားအရာရှိ တစ်ဦးဦးမှာ မိခိ၏ တာဝန် ဝတ္တရားများကို စထာင်ရွက်ရာ၌ဖြစ်စေ၊ ထိုတာဝန် ဝတ္တရားများနှင့် စပ်လျဉ်းရှိဖြစ်စေ ကျခံခဲ့ရသည့်စရိတ်များ၊ တောင်းခံငွေများ၊ ဆုံးရှုံးငွေများ၊ ကုန်ကျငွေများနှင့် ကြွေးမြီတာဝန်များအတွက် ကုမ္ပကီထံမှ လျော်ကြေးရထိုက်စွင့်ရှိစေရမည်။

## ဖျက်သိမ်းခြင်း

၂၄။ ကုမ္ပဏီ၏ အဝေဒွထွေအစည်းအဝေး ဆုံးဖြတ်ရျက်ဖြင့် ကုမ္ပဏီအား ဖျက်သိမ်းနိုင်သည်။ ယင်းသို့ ဖျက်သိမ်းရာတွင် မြန်မာနိုင်ငံကုမ္ပဏီများ အက်ဥပဒေများနှင့် ယင်းဥပဒေများအား အခါအားလျော်စွာ ပြင်ဆင်ပြောင်းလဲထားသည့် တရားဥပဒေများတွင် ပါဝင်သည့် စည်းမျဉ်းများအတိုင်း လိုက်နာပြုလုပ်ရမည်။



(၁၁၇ အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာစုံလင်စွာပါသော ဇယားတွင် လက်မှတ် ရေးထိုးသူ ကျွန်ုပ်တို့ ကိုယ်စီကိုယ်ငှ သည် ဤသင်းဖွဲ့မှတ်တမ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့် အလျှောက် ကျွန်ုပ်တို့၏ အမည်အသီးသီးနှင့် လှဉ်တွဲ၍ပြထားသော အစုစွယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည်ဝင်ရယူကြရန် သဘောတူကြပါသည်။

| ¢۶ | ဘစုထည့်ဝင်သူများ၏<br>ဘမည်၊ နေရပ်လိပ်စာနှင့် ဘလုပ်ဘကိုင်                                                                                                                                                                                                         | နိုင်ငံသားနှင့်<br>အဖျိုးသား<br>မှတ်ပုံတင်အမှတ်                          | ဝယ်ယူသော<br>ဘစ္ဂရှယ်ယာ<br>ဦးရေ | ထိုးမြဲလက်မှတ်                                 |          |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------|------------------------------------------------|----------|
| c  | နေရှင်နယ် ဘင်ဖရာစထရက်ချာ ဟိုးလံခင်း(စ်)<br>ကုမ္ပဏီလီမိတက်<br>အမှတ် - ၃၆၊ သိမ်ဖြူလမ်း၊ ပုဇွန်တောင်မြို့နယ်၊<br>ရန်ကုန်တိုင်းဒေသကြီး။<br>ကိုယ်စားပြုသူ                                                                                                            | ကုမ္ပဏီမှတ်ပုံတင်ဘမှတ်<br>၅၅၁၇/၂၀၁၄ - ၂၀၁၅                               | nə, 000                        | X                                              |          |
|    | ဦးမောင်ကျေး<br>(ကုန်သည်)<br>အမှတ်-စီ/၄၊ဖွန်မြတ်မေတ္တာ<br>ဘိမိရားပင်ရွှေညောင်လမ်း၊စာာမွေမြို့နယ်၊                                                                                                                                                                | ၁၂/လသန (နိုင်)<br>ဝ၁၈၁၇၄                                                 |                                |                                                |          |
|    | ရန်ကုန်တိုင်းဒေသကြီး။<br>ဦးသန်းမြင့်<br>(ကုန်သည်)<br>အမှတ် - ၄၅/ဘေ၊ ၆ဒိုင်ခွဲ၊ ပြည်လမ်း၊ လှိုင်မြို့<br>နယ်၊ ရန်ကုန်တိုင်းဒေသကြီး။                                                                                                                              | ၁၂/လမတ (နိုင်)<br>၀၂၇၇၇၂                                                 |                                | M.                                             | ,<br>jul |
| J  | မြန်မာဓာတုဗေဒနှင့်စက်ပစ္စည်းကုမ္ပဏီလီမိတက်<br>ကိုယ်စားပြုသူ -<br>ဦးအောင်လိုုင်ဦး                                                                                                                                                                                | ကုမ္ပဏီမှတ်ပုံတင်အမှတ်<br>၆၆ဂ/၂၀၀၁-၂၀၀၂<br>၁၂/လမတ (နိုင်)                | ეე,ე∘∘                         | Ingestue                                       | Ď        |
|    | (ကုန်သည်)<br>  အမှတ်-၁၁၂၀-၁၁၂၁၊ သုမင်္ဂလာလမ်း၊ ၁၆/၄<br> ရပ်ကွက်၊ သင်္ဃန်းကျွန်းမြို့နယ်၊ ရန်ကုန်တိုင်းဒေ<br>  သကြီး။<br>ဒေါ်နိုနိုစုအောင်<br>(ကုန်သည်)<br>အမှတ်-၁၁၂၀-၁၁၂၁၊ သုမင်္ဂလာလမ်း၊ ၁၆/၄<br> ရပ်ကွက်၊ သင်္ဃန်းကျွန်းမြို့နယ်၊ ရန်ကုန်တိုင်းဒေ<br>  သကြီး။ | ວງງະຍອງ<br>ວງງະຍອງ<br>ອອງຈອງ                                             |                                | JAAA<br>THUMAN                                 |          |
| 6  | SEPCOIII Electric Power Construction<br>Co.,Ltd<br>No.882-1 Tong'an Road, Laoshan<br>District, Qingdao, China.<br>Represented by                                                                                                                                | Incorporated in the<br>People Republic of<br>China<br>913702121654224203 | 36,900                         | 3527                                           | カ        |
|    | Mr. Zhang Yushi<br>(Businessman)<br>No. 882-1 Tong'an Road, Laoshan<br>District, Qingdao, China.                                                                                                                                                                | Passport No.<br>G49052786                                                |                                | 1 7.02                                         |          |
| na | ၃န်း နေ့စွဲ၊ ၂၀၁၈ ခုနှစ်၊ ဇွန် လ၊ ၂၇<br>က်ပါလက်မှတ်ရှင်များသည် ကျွန်ုပ်၏ ရှေ့မှောက်ဘွင်<br>မှတ်ရေးထိုးကြပါသည်။                                                                                                                                                  | ရက်၊                                                                     | Corpergolicon                  | ည်းBA,RL<br>နိုးBA,RL<br>စစ်ရှေ့နေ [စဉ်ဒုဂု၆၃] |          |

### THE MYANMAR COMPANIES ACT

### PRIVATE COMPANY LIMITED BY SHARES

# Memorandum Of Association

#### OF

## **POWERGEN KYAUKSE COMPANY LIMITED**

 $\phi \quad \phi \quad \phi \quad \phi \quad \phi \quad \phi$ 

I. The name of the Company is **POWERGEN KYAUKSE COMPANY LIMITED.** 

- II. The registered office of the Company will be situated in the Republic of the Union of Myanmar.
- III. The objects for which the Company is established are as on the next page.
- IV. The liability of the members is limited.
- V. The authorized capital of the Company is US Dollar 1,000,000.00/- (US Dollar One Million Only) divided into 1,000,000 shares of USD 1.00 /- (US Dollar One Only) each, with power in General Meeting either to increase, reduce or alter such capital from time to time in accordance with the regulations of the Company and the legislative provisions for the time being in force in this behalf.

### VI. The Objectives for which the Company is established are

- Generating electricity
- Distributing electricity
- Services regarding with generation and distribution of electricity
- Importation, storage and utilization of Liquified Petroleum Gas (LPG), fuel oil and any other energy products, etc for generation and distribution of electricity

VII. To borrow money for the benefit of the Company's business from any person, firm, company, bank or financial organization in the manner that the Company shall think fit.

**PROVISO:-** Provided that the Company shall not exercise any of the above objects whether in the Republic of the Union of Myanmar or elsewhere, save in so far as it may be entitled so as to do so in accordance with the Laws, Orders and Notifications in force from time to time and then only subject to such permission and/or approval as may be prescribed by the Laws, Orders and Notifications of the Republic of the Union of Myanmar for the time being in force.

We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

| Sr.<br>No | Name, Address and<br>Occupation of Subscribers                                                                                                                        | Nationality<br>&<br>N.R.C No.                                                            | Number<br>of shares<br>taken | Signatures |         |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------|------------|---------|
| 1.        | National Infrastructure Holdings Company<br>Limited<br>No. 36, Thein Phyu Road, Pazundaung<br>Township, Yangon.                                                       | Incorporated in<br>Myanmar<br>5517/2014 – 2015                                           | 81,000                       | X          |         |
|           | Represented by<br>U Maung Kyay<br>(Merchant)<br>No.(C-4), Mon Myat Myittar Residence,<br>Pin Shwe Nyaung Street, Tamwe                                                | 12/ LaThaNa (Naing)<br>018174                                                            |                              |            |         |
|           | Township, Yangon.<br>U Than Myint<br>(Merchant)<br>No.45/A, 6 1/2 miles, Pyay Road, Hlaing<br>Township, Yangon.                                                       | 12/LaMaTa (Naing)<br>027772                                                              |                              | A          | 04      |
| 2.        | Myanmar Chemical and Machinery<br>Company Limited<br>No. 1120/1121, Thu Mingalar Street,<br>(16/4) Ward, Thingangyun Township,<br>Yangon.                             | Incorporated in<br>Myanmar<br>668/2001 – 2002                                            | 55,500                       | pagest     | leizelé |
|           | Represented by<br>U Aung Hlaing Oo<br>(Merchant)<br>No. 1120-1121, Thu Mingalar Street, 16/4,<br>Ward, Thingangyun Township, Yangon                                   | 12/LaMaTa (Naing)<br>025897                                                              | (                            | TAT        | ļ.,     |
|           | Daw Noe Noe Su Aung<br>(Merchant)<br>No. 1120-1121, Thu Mingalar Street, 16/4,<br>Ward, Thingangyun Township, Yangon.                                                 | 12/ThaGaKa (Naing)<br>)85395                                                             |                              | HAR AND AN |         |
| 3.        | SEPCOIII Electric Power Construction<br>Co., Ltd<br>No.882-1 Tong'an Road, Laoshan District,<br>Qingdao, China.<br>Represented by<br>Mr. Zhang Yushi<br>(Businessman) | Incorporated in the<br>People Republic of<br>China<br>913702121654224203<br>Passport No. | 13,500                       | 3 Er       | 172     |
|           | No. 882-1 Tong'an Road, Laoshan<br>District, Qingdao, China.                                                                                                          | G49052786                                                                                |                              | <br> <br>  |         |

Yangon Dated the 27 day of Jun, 2018

It is hereby certified that the persons mentioned above Put their signatures in my presence.

Myat Toe B W2 Toe BA, RL Advocate [No.4763]

#### THE MYANMAR COMPANIES ACT

#### PRIVATE COMPANY LIMITED BY SHARES

## Articles Of Association

#### OF

## POWERGEN KYAUKSE COMPANY LIMITED

## 

1. The regulations contained in Table "A" in the First Schedule to the Myanmar Companies Act shall apply to the Company save in so far as such regulations which are inconsistent with the following Articles. The compulsory regulations stipulated in Section 17 (2) of the Myanmar Companies Act shall always be deemed to apply to the Company.

#### PRIVATE COMPANY

- 2. The Company is to be a Private Company and accordingly following provisions shall have effect: -
  - (a) The number of members of the Company, exclusive of persons who are in the employment of the Company, shall be limited to fifty.
  - (b) Any invitation to the public to subscribe for any share or debenture or debenture stock of the Company is hereby prohibited.

#### CAPITAL AND SHARES

- 3. The authorized capital of the Company is USD 1,000,000 /- (US Dollar One Million Only) divided into 1,000,000 shares of USD 1.00/- (US Dollar One Only) each, with power in General Meeting either to increase, reduce or alter such capital from time to time in accordance with the regulations of the Company and the legislative provisions for the time being in force in this behalf.
- 4. Subject to the provisions of the Myanmar Companies Act the shares shall be under the control of the Directors, who may allot or otherwise dispose of the same to such persons and on such terms and conditions as they may determine.

- 5. The certificate of title to share shall be issued under the Seal of the Company, and signed by the General Manager or some other persons nominated by the Board of Directors. If the share certificate is defaced, lost or destroyed, it may be renewed on payment of such fee, if any, and on such terms, if any, as to evidence and indemnity as the Directors may think fit. The legal representative of a deceased member shall be recognized by the Directors.
- 6. The Directors may from time to time make call upon the members in respect of any money unpaid on their shares, and each member shall be liable to pay the amount of every call so made upon him to the persons, and at the times and places appointed by the Directors. A call may be made payable by installments or may be revoked or postponed as the Directors may determine.

### DIRECTORS

- 7. Unless otherwise determined by a General Meeting the number of Directors shall not be less than (2) and not more than (20)
  - The First Directors shall be:-
  - (1) U Maung Kyay
  - (2) U Than Myint
  - (3) U Aung Hlaing Oo
  - (4) Daw Noe Noe Su Aung
  - (5) Mr. Zhang Yushi
- 1. The Directors may from time to time appoint one of their body to the office of the Managing Director for such terms and at such remuneration as they think fit and he shall have all the powers delegated to him by the Board of Directors from time to time.
- 2. The qualification of a Director shall be the holding of at least ( ) shares in the Company in his or her own name and it shall be his duty to comply with the provision of Section (85) of the Myanmar Companies Act.
- 3. The Board of Directors may in their absolute and uncontrolled discretion refuse to register any proposed transfer of shares without assigning any reason.

### PROCEEDINGS OF DIRECTORS

- 4. The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings as they think fit and determine the quorum necessary for the transaction of business. Unless otherwise determined, two shall form a quorum. If any question arising at any meeting the Managing Director's decision shall be final. When any matter is put to a vote and if there shall be an equality of votes, the Chairman shall have a second or casting vote.
- 5. Any Director may at any time summon a meeting of Directors.

13. A resolution in writing signed by all the Directors shall be as effective for all purposes as a resolution passed out at meeting of the Directors, duly called, held and constitued.

### **POWERS AND DUTIES OF DIRECTORS**

- 14. Without prejudice to the general power conferred by Regulation 71 of the Table "A" of the Myanmar Companies Act, it is hereby expressly declared that the Directors shall have the following powers, that is to say power: -
  - (1) To purchase or otherwise acquire for the Company any property, rights or privileges which the Company is authorized to acquire at such price, and generally on such terms and conditions as they think fit; also to sell, lease, abandon or otherwise deal with any property, rights or privileges to which the Company may be entitled, on such terms and conditions as they may think fit.
  - (2) To raise, borrow or secure the payment of such sum or sums in such manner and upon such terms and conditions in all respects as they think fit and in particular by the issue of debentures or debenture stocks of the Company charged upon all or any part of the property of the Company (both present and future) including its uncalled capital for the time being.
  - (3) At their discretion, to pay for any rights acquired or services rendered to the Company, either wholly or partially in cash or in shares, bonds, debentures or other securities of the Company and any such shares may be issued either as fully paid up or with such amount credited as paid up thereon as may be agreed upon; and any such bonds, debentures or other securities may be either specifically charged upon all or any part of the property of the Company and its uncalled capital or not so charged.
  - (4) To secure the fulfilment of any contract or engagement entered into by the Company by mortgage or charge upon all or any of the property of the Company and its uncalled capital for the time being or by granting calls on shares or in such manner as they may think fit.
  - (5) To appoint at their discretion, remove or suspend such Managers, Secretaries, Officers, Clerks, Agents and Servants for permanent, temporary or special services as they may from time to time think fit and to determine their duties and powers and fix their salaries or emoluments and to require security in such instances in such amount as they think fit and to depute any officers of the Company to do all or any of these things on their behalf.
  - (6) To appoint a Director as Managing Director, General Manager, Secretary or Departmental Manager in conjunction with his Directorship of the Company.
  - (7) To accept from any member on such terms and conditions as shall be agreed on the surrender of his shares or any part thereof.

- (8) To appoint any person or persons to accept and hold in trust for the Company any property belonging to the Company or in which it is interested or for any other purposes and to execute and do all such deeds and things as may be requisite in relation to any such trust.
- (9) To institute, conduct, defend of abandon any legal proceedings by or against the Company or its officers or otherwise concerning the affairs of the Company and also to compound and allow time for payment or satisfaction of any debts due to or of any claims and demands by or against the Company.
- (10) To refer claims and demands by or against the Company to arbitration and to observe and perform the awards.
- (11) To make and give receipts, releases and other discharges for money payable to the Company and for the claims and demands of the Company.
- (12) To act on behalf of the Company in all matters relating to bankruptcy and insolvency.
- (13) To determine who shall be entitled to sign bills of exchange, cheques, promissory notes, receipts, endorsements, releases, contracts and documents for or on behalf of the Company.
- (14) To invest, place on deposit and otherwise deal with any of the moneys of the Company not immediately required for the purpose thereof, upon securities or without securities and in such manners as the Directors may think fit, and from time to time vary or realize such investments.
- (15) To execute in the name and on behalf of the Company in favour of any Director or other person who may incur or be about to incur any personal liability for the benefit of the Company, such mortgages of the Company's property (present and future)as they think fit and any such mortgage may contain a power of sale and such other powers, covenants and provisions as shall be agreed on.
- .(16) To give any officer or other person employed by the Company a commission on the profits of any particular business or transaction or a share in the general profit of the Company and such commission or share of profit shall be treated as part of the working expenses of the Company.
- (17) From time to time, to make, vary and repeal bye-laws for the regulation of the business of the Company, the officers and servants or the members of the Company or any section thereof.
- (18) To enter into all such negotiations and contracts and rescind and vary all such contracts and execute and do all such acts, deeds and things in the name and on behalf of the Company as they may consider expedient for or in relation to any of the matter aforesaid or otherwise for the purposes of the Company.
- (19) To borrow money for the benefit of the Company's business from any person, firm or company or bank or financial organization of local and abroad in the manner that the Directors shall think fit.

#### **GENERAL MEETINGS**

15. A general meeting shall be held within eighteen months from the date of its incorporation and thereafter at least once in every calendar year at such time( not being more than fifteen month after the holding of the last preceding general meeting )and places as may be fixed by the Board of Directors. No business shall be transacted at any general meeting unless a quorum of members is presented at the time when the meeting proceeds to business, save as herein otherwise provided Member holding not less than 50 percent of the issued shares capital(not less than two members) personally present, shall form a quorum for all purposes. And if and when in the case of there are only two number of members in the Company, those two members shall form a quorum.

#### DIVIDENDS

16. The Company in general meeting may declare a dividend to be paid to the members, but no dividend shall exceed the amount recommended by the Directors. No dividends shall be paid otherwise than out of the profits of the year or any other undistributed profits.

#### **OFFICE STAFF**

17. The Company shall maintain an office establishment and appoint a qualified person as General Manager and other qualified persons as office staffs. The remunerations and allowances such as salaries, travelling allowances and other expenditures incidental to the business shall be determined by the Board of Directors, and approved by the general meeting. The General Manager shall be responsible for the efficient operation of the office in every respect and shall be held accountable at all times to the Managing Director.

#### ACCOUNTS

- 18. The Directors shall cause to be kept proper books of account with respect to : -
  - (1) all sums of money received and expended by the Company and the matters in respect of which the receipts and expenditures take place;
  - (2) all sales and purchases of goods by the Company;
  - (3) all assets and liabilities of the Company.
- 19. The books of account shall be kept at the registered office of the Company or at such other place as the Directors shall think fit and shall be opened to inspection by the Directors during office hours.

#### AUDIT

20. Auditors shall be appointed and their duties regulated in accordance with the provisions of the Myanmar Companies Act or any statutory modifications thereof for the time being in force.

#### NOTICE

21. A notice may be given by the Company to any member either personally or sending it by post in a prepaid letter addressed to his registered address.

#### THE SEAL

22. The Directors shall provide for the safe custody of the Seal, and the Seal shall never be used except by the authority of the Directors previously given, and in the presence of one Director at least, who shall sign every instrument to which the Seal is affixed.

#### INDEMNITY

23. Subject to the provisions of Section 86 (C) of the Myanmar Companies Act and the existing laws, every Director, Auditor, Secretary or other officers of the Company shall be entitled to be indemnified by the Company against all costs, charges, losses, expenses and liabilities incurred by him in the execution and discharge of the duties or in relation thereto.

#### WINDING-UP

24. Subject to the provisions contained in the Myanmar Companies Act and the statutory modification thereupon, the Company may be wound up voluntarily by the resolution of General Meeting.



We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

| Sr.<br>No | Name, Address and<br>Occupation of Subscribers                                                                                                                            | Nationality<br>&<br>N.R.C No.                                            | Number<br>of shares<br>taken | Signatures   |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------|--------------|
| 1.        | National Infrastructure Holdings Company<br>Limited<br>No. 36, Thein Phyu Road, Pazundaung<br>Township, Yangon.<br>Represented by                                         | Incorporated in<br>Myanmar<br>5517/2014 – 2015                           | 81,000                       | X.           |
|           | U Maung Kyay<br>(Merchant)<br>No.(C-4), Mon Myat Myittar Residence,<br>Pin Shwe Nyaung Street, Tamwe<br>Township, Yangon.                                                 | 12/ LaThaNa (Naing)<br>018174                                            |                              |              |
|           | U Than Myint<br>(Merchant)<br>No.45/A, 6 1/2 miles, Pyay Road, Hlaing<br>Township, Yangon.                                                                                | 12/LaMaTa (Naing)<br>027772                                              |                              |              |
| 2.        | Myanmar Chemical and Machinery<br>Company Limited<br>No.1120/1121, Thu Mingalar Street, 16/4<br>Ward, Thingangyun Township, Yangon.<br>Represented by<br>U Aung Hlaing Oo | Incorporated in<br>Myanmar<br>668/2001 – 2002                            | 55,500 (                     | ponge Plavid |
|           | (Merchant)<br>No. 1120-1121, Thu Mingalar Street, 16/4,<br>Ward, Thingangyun Township, Yangon.<br>Daw Noe Noe Su Aung                                                     | 12/LaMaTa (Naing)<br>025897                                              |                              | Stat:        |
|           | (Merchant)<br>No. 1120-1121, Thu Mingalar Street, 16/4,<br>Ward, Thingangyun Township, Yangon.                                                                            | }2/ThaGaKa (Naing)<br>185395                                             |                              | Tanovir      |
| 3.        | SEPCOIII Electric Power Construction<br>Co., Ltd<br>No 882-1 Tong'an Road, Laoshan District,<br>Qingdao, China.<br>Represented by<br>Mr. Zhang Yushi                      | Incorporated in the<br>People Republic of<br>China<br>913702121654224203 | 13,500                       | 2025A        |
|           | (Businessman)<br>No. 882-1 Tong'an Road, Laoshan<br>District, Qingdao, China.                                                                                             | Passport No.<br>G49052786                                                |                              |              |

Yangon Dated the 27 day of Jun , 2018

li is hereby certified that the persons mentioned above Put their signatures in my presence.

--

Toe BA,RL

Advocate [No.4763]

#### CONSORTIUM AGREEMENT

Between

National Infrastructure Holdings Company Limited

And

Tellhow International Engineering & Contracting Co., Ltd.

And

Myanmar Chemical & Machinery Company Limited

And

SEPCOIII Electric Power Construction Co., Ltd.

In relation to

135 MW Rental Power Project (EPGE G 02/2017-2018)

Issued by

Electric Power Generation Enterprise (EPGE)

for the ?

This Consortium Agreement (the Consortium Agreement) is made on this 6<sup>th</sup> day of March 2018.

#### BY AND BETWEEN

National Infrastructure Holdings Company Limited (NIHC), a company incorporated and existing under the laws of Myanmar, having its registered office at No. 36, Thein Phyu Road, Puzundaung Township, Yangon, Myanmar, duly represented herein by its authorized representative Maung Kyay;

And

Tellhow International Engineering & Contracting Co., Ltd. (Tellhow), a company incorporated and existing under the laws of People's Republic of China, having its registered office at 6FL, Block A, Tellhow Plaza, 2 Yuncheng Street, Yi-Town Economic Development Zone, Beijing duly represented herein by its authorized representative, Du Jianwei;

#### And

Myanmar Chemical & Machinery Company Limited (MCM), a company incorporated and existing under the laws of Myanmar, having its registered office at No. 1120-1121, Thu Mingalar St, 16/4 Ward, Thingangyun T/S, Yangon, Myanmar duly represented herein by its authorized representative, U Aung Hlaing Oo;

#### And

SEPCOIII Electric Power Construction Co., Ltd. (SEPCOIII), a company incorporated and existing under the laws of China, having its registered office at No. 882-1, Tong'an Road, Laoshan District, Qingdao City, P.R.C. duly represented herein by its authorized representative, Wang Lina;

hereafter referred to individually as a Party and collectively as the Parties.

#### WHEREAS:

- A) The Parties are interested in jointly bidding for the 5-year rental power tender called by the EPGE for the Kyaukse Region, in Myanmar (EPGE G 02/2017-2018) ("Project") as members of a bidding consortium and in accordance with the terms and conditions of the bid documents in respect of the Project.
- B) The Parties now wish to enter into this Agreement to establish the rights and obligations as amongst themselves in respect of their relationship in this bidding consortium.

NOW IT IS HEREBY AGREED as follows:

A. the the of

#### 1. DEFINITIONS

In this Consortium Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto in the SRFP.

#### 2. CONSORTIUM

- 2.1 The Parties do hereby irrevocably constitute a bidding team (the Consortium) for the purposes of Jointly participating in the bidding process of EPGE, subject to Clause 9 below.
- 2.2 Parties hereby undertake to participate in the bidding process only through the Consortium and not individually and/or through any other consortium constituted for the Project, either directly or indirectly or through any of their affiliates.
- 2.3 It is agreed that the Proposal shall be submitted in the name of the Consortium.

#### 3. ANCHOR MEMBER

- (a) The Consortium hereby appoints for the term of this Consortium Agreement National Infrastructure Holdings Company Limited as Anchor Member (with the meaning given to such term in the SRFP) and accordingly empowers National Infrastructure Holdings Company Limited to act on behalf of the Consortium, and to be authorized to act and receive instructions on behalf of all Consortium members, in each case in relation to the Project, until the earlier of: (i) the date on which the Project Agreements are in force and effect in accordance with their terms; or (ii) the effective date of termination of this Consortium Agreement in accordance with Clause 8 below.
- (b) The Parties agree that the Proposal shall be submitted by the Parties in the name of the Consortium and mention, in accordance with the SRFP, that National Infrastructure Holdings Company Limited is the Anchor Member and representative of the Consortium.

#### 4. **RESPONSIBILITY FOR THE OFFERS**

Unless otherwise specified in the SRFP, the Parties shall be jointly and severally liable towards EPGE in relation to the Proposal submitted by the Parties as a Consortium.

#### 5. SHARES IN THE CONSORTIUM

The shares of each Party in the Consortium shall be:

- (a) 24% of the consortium company shall be held by NIRC;
- (b) 51% of the consortium company shall be held by Tellhow;
- (c) 16% of the consortium company shall be held by MCM; and
- (d) 9% of the consortium company shall be held by SEPCOIII.

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#### 6. INCORPORATION OF HOLDING COMPANY

As SRFP envisages that the Successful Bidder will form a Company if selected as Winning Bidder, the Parties agree, as soon as practicable following the Consortium being designated as the Winning Bidder, to incorporate a company to hold the Parties' interests in the Company, enter into the Project Agreements and generally participate in the Project.

#### 7. REPRESENTATION AND WARRANTIES OF THE PARTIES

Each Party represents to the other Parties that, as of the date of this Consortium Agreement:

- (a) it is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Consortium Agreement;
- (b) the signature, delivery and performance by such Party of this Consortium Agreement has been authorised by all necessary and a copy of board resolution/power of attorney in favour of the person executing this Consortium Agreement for the delegation of power and authority to execute this Consortium Agreement on its behalf is annexed to this Consortium Agreement, and will not, to the best of its knowledge:
  - (i) require any consent or approval not already obtained;
  - (ii) violate any applicable law presently in effect and having applicability to it;
  - (iii) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof; or
  - (iv) violate any clearance, permit, concession, grant, license or other governmental authorisation, approval, judgement, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party;
  - (v) the Parties or their affiliated group (consortium) shall not have any litigation with EPGE, other organizations involved in current project and other projects;
- (c) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Consortium Agreement.

#### 8. TERMINATION

- 8.1 This Consortium Agreement shall enter into effect on the date of signature by all Parties and shall continue to be valid until the first to occur of any of the following events:
  - (a) EPGE definitively awards the Project to a third party;
  - (b) EPGE cancels the SRFP and/or the Project;
  - (c) the date falling 30 calendar days after the expiry of the bid validity period for the Project unless extended by the agreement of the Parties;

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- (d) if no Project is awarded by the date failing 6 months after the date of this Consortium Agreement, unless extended by the agreement of the Parties.
- 8.2 For each Project that is awarded to the Consortium, this Consortium Agreement shall not be applicable, in respect of that Project, upon signature and entry into force and effect of the Project Agreements in respect of that Project, in accordance with their terms.
- 8.3 No Party shall be entitled to withdraw from this Consortium or this Agreement until the expiry of this Agreement as set out above.

#### 9. MISCELLANEOUS

- 9.1 This Consortium Agreement shall be governed by Singapore law. Any matter, claim or dispute arising out of or in connection with this Agreement, whether contractual or non-contractual, is to be determined in accordance with Singapore Law.
- 9.2 Any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration administered by the Singapore International Arbitration Centre ("SIAC") in accordance with the Arbitration Rules of the Singapore International Arbitration Centre ("SIAC Rules") for the time being in force, which rules are deemed to be incorporated by reference in this clause.

The seat of the arbitration shall be Singapore. The Tribunal shall consist of three arbitrator(s). The language of the arbitration shall be English.

Arbitration proceedings and any awards subsequently made shall be kept confidential. The arbitration award shall be final and binding upon the Parties. Judgment upon the award rendered may be entered in any court having jurisdiction, or application may be made to such court for juridical recognition of the award and an order of enforcement, as the case may be. A Party may apply to any competent judicial authority for interim or conservatory relief in support of or in connection with arbitral proceedings commenced pursuant to this Clause. The application for such measures or the enforcement of such measures ordered by such judicial authority shall not be deemed an infringement or waiver of the agreement to arbitrate and shall not affect the powers of the arbitrator.

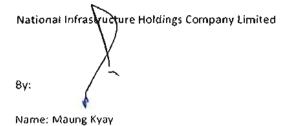
- 9.3 No Party may assign all or a portion of its interest under this Consortium Agreement to a third party without the prior written approval of the other Party.
- 9.4 This Consortium Agreement may be varied only by the agreement of the Parties in writing,
- 9.5 Nothing in this Consortium Agreement shall be construed to create an association, trust, partnership, or other fiduciary relationship between the Parties or to impose a trust or partnership duty, obligation or liability between the Parties.
- 9.6 This Agreement may be executed in counterparts with the same force and effect as if executed on a single document and all such counterparts shall constitute one and the same instrument

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IN WITNESS WHEREOF, the Parties hereto have executed this Consortium Agreement on the date written above.

**SIGNATORIE5** 



Position: Managing Director

Tellhow International Engineering & Contracting Co., Ltd.

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Name: Ou Jianwei

Position: Chief Engineer

Myanmar Chemical & Machinery Company Limited

Name: U Aung Hlaing Oo

Position: Managing Director

SEPCOIII Electric Power Construction Co., Ltd.

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Ву:

Name: Wang Lina

Position: Chief Representative of Myanmar, Overseas Business Development

Consortium comprising of :

National Infrastructure Holdings Co., Ltd No.36, Thein Phyu Road, Pazuntaung Township, Yangoo, Myanmar

Myanmar Chemical & Machinery Co., Ltd No. 1120-1121, Thu Mingalar St, 16/4 Ward, Thingangyun T/S. Yangon, Myanmar

SEPCOIII Electric Power Construction Co., Ltd No.882-1 Tong' an Road, Laoshan District, QingDao, People' s Republic of China

Tellhow International Engineering & Contracting Co., Ltd #266 Huiren Road, Xiaolan Industry Park, Nanchang, People's Republic of China

Date: 30 June 2018

Electric Power Generation Enterprise Building No.27, Naypyitaw The Republic of the Union of Myanmar

Dear Sirs

Attn : The Managing Director

Subject:

#### 135 MW Rental Power Project (EPGE G 02/2017-2018)

Withdrawal of Tellhow International Engineering & Contracting Co., Ltd from the Consortium

We are the Consortium comprising of Tellhow International Engineering & Contracting Co., Ltd ( "Tellhow"), a company established in the People's Republic of China, National Infrastructure Holdings Co., Ltd. ("NTHC"), Myanmar Chemical & Machinery Company Ltd. ("MCM") and SEPCOILI Electric Power Construction Co., Ltd (. "SepcoILI"). We\_have



formed the Consortium to tender for a Gas Fired Power Plant in the Kyaukse Region, Myanmar (the "Project") to Electric Power Generation Enterprises (the "EPGE") on 28 February 2018 in respect of the 135 MW Rental Power Project (EPGE G 02/2017-2018) and have been awarded the Letter of Acceptance of the Project on May 7<sup>th</sup>, 2018.

We have met with EPGE representatives in Naypyitaw on several occasions to discuss the details of the Project. We appreciate very much the patience and attentiveness of the EPGE representatives in discussing the matter with us.

No .....

Date .....

Unfortunately, due to the different understandings of the investment risks attached to the Project among the Consortium members, Tellhow has now decided to withdraw from the Consortium, and Tellhow's engagement in this Project has therefore stopped. It is therefore with much regret that we now write to officially notify you of Tellhow's withdrawal from the Consortium and the Project, which will take effect from June 30, 2018 (the "Withdrawal Date"). Therefore with immediate effect from the Withdrawal Date, Tellhow is no longer be a member of the Consortium or involved in the Project, and Tellhow will have no further rights or obligations in relation to the Project. We will resolve the formalities of Tellhow's withdrawal from the Consortium in relation to the Project, in accordance with your guidance and due procedures.

We, acting still as a consortium (ie excluding Tellhow), have mutually resolved to continue to undertake the Project until its eventual success. We will provide detailed and feasible alternative solutions and ensure the Project be completed on schedule.

We respectfully request for your acknowledgment to this notification and please update your records with respect to Tellhow's withdrawal from the Consortium.

Please let us know if you have any query.

Page 3

Signature Page





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မြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်အစိုးရ 000130 အမျိုးသွားစီမံကိန်းနှင့် စီးပွားရေးဖွံ့ဖြိုးတိုးတက်မှုဝန်ကြီးဌာန ကြာ့မ္ပဏာိမ္မတာ်ပုံတာင်လာက်န်မ္မတာ်

ဘမ္မတ် ၂၅၁၇ / ၂၀၁၄ – ၂၀၁၅ မြန်မာနိုင်ငံ တုမ္ပဏီများ အက်ဥပဒေအရ နေရှင်နယ် အင်ဖရာစထရက်ချာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပဏီ လီမိတက် ကုမ္ပဏီ လီမိတက် ကုမ္ပဏီအဖြစ် ၂၀၁၅ နှစ်၊ ဖေဖေါ်ဝါရီ လ၊ ၁၀ ရက်နေ့တွင် မှတ်ပုံတင်ခွင့်ပြုလိုက်သည်။

THE GOVERNMENT OF THE REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF NATIONAL PLANNING AND ECONOMIC DEVELOPMENT

## CERTIFICATE OF INCORPORATION

NO. 5517 of 2014 - 2015

I hereby certify that <u>NATIONAL INFRASTRUCTURE HOLDINGS</u> <u>COMPANY LIMITED</u> is this day incorporated under the Myanmar Companies Act and that the company is Limited.

For Director General (Nilar Mu , Deputy Director)

Directorate of Investment and Company Administration

# ကုမ္ပဏီနှင့်သက်ဆိုင်သည့်အချက်အလက်များ

| (က)<br>(ခ) | ကုမ္ပဏီ ရုံးခန်းလိပ်စာ၊                            | ဦးမောင်ကျေး (ခ)တီကာကွေး (၁၂/လသန္ (နိုင် )ပၥ၈၁၇၄)<br>အမှတ်-၄၅/၄၆၊ဗဟိုရ်စည်အိမ်ရာ၊ လမ်းမတော်မြို့နယ်၊<br>ရန်ကုန်တိုင်းဒေသကြီး။ |
|------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| (ဂ)<br>(ဃ) | ဆက်သွယ်ရန် ဖုန်းနံပါတ်၊<br>ဒါရိုက်တာများ အမည်စာရင် | ဂ၁-၂၂၉၂၃၄<br>့(၁) ဦးသန်းမြင့်(ခ)ခေါ်တင်အိန်<br>၁၂/လမတ(နိုင်)ဂ၂၇၇၅၂                                                           |

မှတ်ချက်။ (၁) ဤကုမ္ပဏီမှတ်ပုံတင်လက်မှတ်သည်မှတ်ပုံတင်ရက်စွဲ( ၁၀-၂-၂၀၁၅ )မှ ( ၉-၂-၂၀၂၀ )ရက်နေ့အထိ(၅)နှစ်သက်တမ်းအတွက်သာ ဖြစ်သည်။ သက်တမ်း မကုန်ဆုံးမီ (၃)လအလိုတွင် သက်တမ်းတိုးရန် ရင်းနှီး မြှုပ်နှံမှုနှင့် ကုမ္ပဏီများ ညွှန်ကြားမှု ဦးစီးဌာနသို့ လျှောက်ထား ရမည်။

> (၂) ကုမ္ပဏီ အနေဖြင့် သင်းဖွဲ့မှတ်တမ်းတွင်အဆိုပြု တင်ပြထားသော လုပ်ငန်းရည်ရွယ်ချက်များကိုသာ လုပ်ကိုင်ရမည်။

> (၃) သင်းဖွဲ့မှတ်တမ်းပါ ရည်ရွယ်ချက်များသည် သက်ဆိုင်ရာ ပြည်ထောင်စု ဝန်ကြီးဌာန၏ တည်ဆဲဥပဒေ၊ နည်းဥပဒေ၊ လုပ်ထုံးလုပ်နည်း များနှင့်အည် ခွင့်ပြုချက် ရရှိမှသာ ဆောင်ရွက်ခွင့် ရှိမည် ဖြစ်ပါသည်။

> (၄) လုပ်ငန်းရည်ရွယ်ချက် ပြောင်းလဲ လုပ်ကိုင်လိုပါက ပြောင်းလဲ လုပ်ကိုင် လိုသည့် လုပ်ငန်း ရည်ရွယ်ချက်များအား သင်းဖွဲ့မှတ်တမ်းတွင် ပြင်ဆင် မှတ်ပုံတင်ရန်အတွက် ဒါရိုက်တာအဖွဲ့ (BOD)၏ အထူး အစည်းအဝေး ဆုံးဖြတ်ချက် မှတ်တမ်းနှင့်အတူ ရင်းနှီးမြှုပ်နှံမှုနှင့်ကုမ္ပဏီများ ညွှန်ကြားဖွ ဦးစီးဌာန သို့ လျှောက်ထား ရမည် ။

> > ညွှန်ကြားရေးမှူးချုပ် (ကိုယ်စား) (သင်းသင်းမြတ်၊ လက်ထောက်ညွှန်ကြားရေးမှူး)ှို့

လာရောက်ထုတ်ယူသည့် ရက်စွဲ၊ 🏾 🤰 👔 👔 🗄

FORM XXVI

### PARTICULARS OF DIRECTORS, MANAGERS AND MANAGING AGENTS AND OF ANY CHANGES THEREIN

(Myanmar Companies Act, See Section 87)

Name of Company : NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD.

U MAUNG KYAY @ Presented by : TEE KAR KWAY (M.D)

| The Present<br>Christian name<br>or names of<br>surnames | Nationality,<br>National<br>Registration<br>Card No. | Usual Residential Address                                                      | Other<br>Business<br>Occupation | Changes                                  |
|----------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------|------------------------------------------|
| 1. U MAUNG KYAY @<br>TEE KAR KWAY                        | MYANMAR<br>12/LA THA NA(NAING)<br>018174             | NO.(C/4), PIN SHWE NYAUNG STREET, TAMWE KALAY<br>WARD, TAMWE TOWNSHIP, YANGON. | MERCHANT                        | MANAGING DIRECTOR                        |
| 2.U THAN MYINT @<br>KHAW TIN EAIN                        | MYANMAR<br>12/LA MA TA(NAING)<br>027772              | NO.(45-A), PYAY ROAD, 11-WARD, HLAING TOWNSHIP,<br>YANGON.                     | MERCHANT                        | DIRECTOR                                 |
| 3.U KYAW THAR CO                                         | MYANMAR<br>12/LA MA TA(NAING)<br>001558              | NO.64, SHWE TAUNG TAN STREET, LANMADAW TSP, YANGON.                            | MERCHANT                        | APPOINTED AS DIRECTOR<br>w.e.f(1.6.2016) |
| 4.U KYAW MYINT OO                                        | MYANMAR<br>12/LA MA TA(NAING)<br>003040              | NO.62, SHWE TAUNG TAN STREET, LANMADAW TOWNSHIP,<br>YANGON.                    | MERCH ANT                       | APPOINTED AS DIRECTOR<br>w.e.f(1.6.2016) |

NOTE: (1) A Complete list of the Directors or Managers or Managing Agents shown as existing in the last particulars.
 (2) A note of the changes since the last list should be made in the column for "Changes" by placing against the new Director's name the word "in place of ......and by writing against any former Director's name the the word "dead" "resigned" or as the case may be giving the date of change against the entry.

 No.

Signature Designation

THAN MYINT DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD



FORM XXVI

PARTICULARS OF DIRECTORS, MANAGERS AND MANAGING AGENTS AND OF ANY CHANGES THEREIN

(Myanmar Companies Act, See Section 87)

Name of Company : NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD.

Presented by TEE KAR KWAY (M.D)

| The Present<br>Christian name<br>or names of<br>surnames | Nationality,<br>National<br>Registration<br>Card No. | Usual Residential Address                                                       | Other<br>Business<br>Occupation | Changes                                  |
|----------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------|------------------------------------------|
| 5. U NE LIN                                              | MYANMAR<br>12/PA 2A TA(NAING)<br>031498              | NO. (C/4), MON MYAT MYITTAR RESIDENCE, TAMWE<br>TOWN SHIP, YANGON.              | MERCHANT                        | APPOINTED AS DIRECTOR<br>w.e.f(1.6.2016) |
| 6. U YE' HTUT                                            | MYANMAR<br>12/PA ZA TA(NAING)<br>031497              | NO. (C/4), MON MYAT MYITTAR RESIDENCE, TAMWE<br>TOWNSHIP, YANGON.               | MERCHANT                        | APPOINTED AS DIRECTOR<br>w.e.f(1.6.2016) |
| 7. U THAN MYINT                                          | MYANMAR<br>12/BA HA NA(NAING)<br>066699              | ROOM.307, BUILDING NO.D, KYAUKRASAN HOUSING<br>TAMWE TOWNSHIP, YANGON.          | MERCHANT                        | GENERAL MANAGER                          |
| 8. DAW TAY RAIN(a)<br>DAW AYE SAN                        | MYANMAR<br>12/KHA YA NA(NADKG)<br>078006             | NO. (C/3), PIN SHWE NYAUNG STREET, TAMWE KALAY<br>WARD, TAMWE TOWNSHIP, YANGON. | MERCHANT                        | GENERAL MANAGER                          |
|                                                          |                                                      |                                                                                 |                                 |                                          |

NOTE: (1) A Complete list of the Directors or Managers or Managing Agents shown as existing in the last particulars. (2) A note of the changes since the last list should be made in the column for "Changes" by placing against the new Director's name the word "in place of and by writing against any former Director's name the the word "dead" "resigned" or as the case may be giving the date of change against the entry

Signature

Designation THAN MYINT DIRECTOR NATIONAL INFEASTRIA TORE NOLDINGS CO., LTD

Dated this ..... 1.6.2016.

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မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

နေရှင်နယ် အင်ဖရာစထရက်ချာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပဏီလီမိတက်

၏

သင်းဖွဲ့မှတ်တမ်း

နှင့်

သင်းဖွဲ့စည်းမျဉ်းများ

THE MYANMAR COMPANIES ACT

PRIVATE COMPANY LIMITED BY SHARES

**Memorandum Of Association** 

**Articles Of Association** 

NATIONAL INFRASTRUCTURE HOLDINGS COMPANY

LIMITED

AND

OF

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

# မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

# နေရှင်နယ် အင်ဖရာစထရက်ချာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပဏီလီမိတက်

ର୍ଚ୍ଚା

သင်းဖွဲ့မှတ်တမ်<mark>း</mark>

 $\diamond \ \diamond \ \diamond \ \diamond \ \diamond \ \diamond$ 

၁။ ကုမ္ပဏီ၏အမည်သည် နေရှင်နယ် အင်ဖရာစထရက်ရာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပဏီလီမိတက် ဖြစ်ပါသည်။

၂။ ကုမ္ပဏီ၏ မှတ်ပုံတင် အလုပ်တိုက်သည်ပြည်ထောင်စု မြန်မာနိုင်ငံတော်အတွင်း တည်ရှိရမည်။

၃။ အစုဝင်များ၏ ပေးရန်တာဝန်ကို ကန့်သတ်ထားသည်။

 ၄။ ကုမ္ပဏီ၏ သတ်မှတ်မတည်ငွေရင်းသည် ကျပ်
 ၃၀၀,၀၀၀,၀၀၀,၀၀၀
 /-( ကျပ်

 သန်းသုံးသိန်:
 တိတိ ) ဖြစ်၍ ငွေကျပ်
 ၁၀၀,၀၀၀,၀၀၀
 /-( ကျပ်

 တစ်သိန်:
 တိတိ ) တန်အစုရှယ်ယာပေါင်:
 ( ၃၀၀၀,၀၀၀ )

 ခဲကားပါသင်္ခ။
 ကမ္မဏီ၏ ခင်္ငမနီးမတ္တေိ ကမ္မဏီ၏ ခင်္ငမများမင့် ခောက်ခိုက္တားခင်္ တွင်ကိုဖြစ်သောာ

ခွဲထားပါသည်။ ကုမ္ပဏီ၏ ရင်းနှီးငွေကို ကုမ္ပဏီ၏ စည်းမျဉ်းများနှင့် လက်ရှိတရားဝင် တည်ဆဲဖြစ်နေသော တရားဥပဒေ အထွေထွေ ပြဋ္ဌာန်းချက်များ နှင့်အညီ အထွေထွေ သင်းလုံးကျွတ် အစည်းအဝေး၌ တိုးမြှင့်နိုင်ခွင့်၊ လျှော့ချနိုင်ခွင့် နှင့် ပြင်ဆင်နိုင်ခွင့် အာဏာရှိစေရမည်။

ကုမ္ပဏီသည် အထက်ဖော်ပြပါ ရည်ရွယ်ချက်များကို ပြည်ထောင်စုသမ္မတ မြန်မာ နိုင်ငံတော် အတွင်း ၌ ဖြစ်စေ ၊ အခြား မည်သည့် အရပ်ဒေသ၌ဖြစ်စေ ၊ အချိန်ကာလအလိုက် တည်မြဲနေသော တရား ဉပဒေ များ ၊ အမိန့်ကြော်ငြာစာများ ၊ အမိန့်များ က ခွင့် ပြုထားသည့် လုပ်ငန်းများမှအပ အခြား လုပ်ငန်းများ ကို လုပ်ကိုင် ဆောင်ရွက်ခြင်း မပြုပါ ။ ထိုအပြင် ပြည်ထောင်စု သမ္မတ မြန်မာနိုင်ငံတော် အတွင်း၌ အချိန် ကာလ အားလျော်စွာ တည်မြဲနေသည့် တရား ဥပဒေပြဋ္ဌာန်းချက်များ ၊ အမိန့် ကြော်ငြာစာများ ၊ အမိန့်များနှင့် လျော်ညီသင့်တော်ခြင်း သို့မဟုတ် ၊ ခွင့် ပြုထားရှိခြင်း ရှိမှ သာလျှင် လုပ်ငန်းများကို ဆောင်ရွက်မည်ဟု ခြင်းချက်ထားရှိပါသည်။

အဖွဲ့ အစည်း ၊ ကုမ္ပဏီ ၊ ဘဏ် ၊ သို့မဟုတ် ၊ ငွေကြေး အဖွဲ့ အစည်း – ထံမှမဆို ငွေချေးယူရန် ။ ခြင်းချက် ။

(၂) ကုမ္ပဏီမှ သင့်တော်လျှောက်ပတ်သည်ဟု ယူဆပါက ကုမ္ပဏီ၏ စီးပွားရေးလုပ်ငန်းတွင် အကျိုးရှိစေရန် အတွက် မည်သည့် ပုဂ္ဂိုလ်၊ စီးပွားရေး

(çn) အသေးစား ငွေရေးကြေးရေးလုပ်ငန်း၊

- လျှပ်စစ်နှင့် အီလက်ထရောနစ် ကုန်ပစ္စည်းများ တပ်ဆင်ခြင်း၊ ပြုပြင်ခြင်းနှင့် မွမ်းမံ တည်ဆောက် ခြင်း လုပ်ငန်းများ၊ (၄၃)
- ယာဉ်နှင့် စက်ကိရိယာအမျိုးမျိုး ကြံ့ခိုင်ရေးပြုလုပ်ခြင်း၊ မွမ်းမံခြင်းနှင့် ပြင်ဆင်ခြင်းလုပ်ငန်းများ၊ (ç j)
- (၄၁) စာရင်းရေးသွင်းခြင်း၊ စာရင်းစစ်ဆေးခြင်းနှင့် ဥပဒေ အကြံပေး ဝန်ဆောင်မှု လုပ်ငန်းများ၊
- (၄၀) စီမံကိန်းသစ်များ၌ ဖြစ်မြောက်နိုင်စွမ်း ရှိမရှိ လေ့လာခြင်း၊ စီမံကိန်းပုံစံများချမှတ်ခြင်း၊ စီမံကိန်း ကုန်ကျစရိတ်ခန့်မှန်းခြင်းနှင့် တန်ဖိုးတွက်ချက်ခြင်းလုပ်ငန်းများ၊
- (၃၉) တိုင်းတာရေးနှင့် စစ်ဆေးရေး လုပ်ငန်း၊

(၄၄) ဆောက်လုပ်ရေးလုပ်ငန်း၊ ကျောက်မျက်လုပ်ငန်း၊

ခရီးသွားလုပ်ငန်း၊

ဟိုတယ်လုပ်ငန်း၊

(၄၅)

(၄၆)

(ናر)

- ုံနှိပ်ထုတ်စေခြင်း လုပ်ငန်း၊ (၃၈)
- သယ်ယူပို့ဆောင်ရေး လုပ်ငန်း၊ (မီးရထားနှင့် လေကြောင်းမှအပ) (၃၇)
- (၃၆) ဆေးဝန်ဆောင်မှု လုပ်ငန်းအမျိုးမျိုး၊
- ဖျော်ဖြေရေးလုပ်ငန်းနှင့် ယင်းနှင့် ပတ်သက်သည့် လုပ်ငန်းများ (၃၅)
- (၃၄) ကြော်ငြာနှင့် ကြော်ငြာ ကိုယ်စားလှယ် လုပ်ငန်းများ၊
- အေဂျင်စီလုပ်ငန်းအမျိုးမျိုး၊ ကျွမ်းကျင်မှုအတိုင်ပင်စံများ၊ လုပ်ငန်းအတိုင်ပင်စံများ၊ အုပ်ချုပ်မှု အတိုင်ပင်စံများနှင့် အကြံပေး ဝန်ဆောင်မှုလုပ်ငန်းများ၊ (၃၃)
- အစိုးရ၏ ခွင့်ပြုချက်ဖြင့် သတ္တုရှာဖွေခြင်း၊ တူးဖော်ခြင်း၊ ထုတ်လုပ်ခြင်း၊ ပြုပြင်ခြင်းနှင့် ထွက်ရှိသောကုန်ပစ္စည်းများကို ရောင်းချခြင်းလုပ်ကိုင်ရန်၊ (၃၂)
- အထည်အလိပ်နှင့် အဝတ်အထည်များ ထုတ်လုပ်ခြင်း၊ (၃၁)
- (၃၀) လျှပ်စစ်နှင့်အီလက်ထရောနစ် ကုန်ပစ္စည်းများ ထုတ်လုပ်ခြင်း၊
- စက်ရုံသုံးပစ္စည်းများ ထုတ်လုပ်ခြင်း၊ (ഗ്ര)
- လက်မှုအနုပညာပစ္စည်းများ၊ ယွန်းထည်များနှင့် ပရိဘောဂများ ထုတ်လုပ်ခြင်း၊ (J7) ဆောက်လုပ်ရေးပစ္စည်းများနှင့် သုတ်ဆေးများ ထုတ်လုပ်ခြင်း၊ (၂၈)
- (၂၆) ယာဉ်နှင့်စက်ကိရိယာများ၊ အပိုပစ္စည်းများ ထုတ်လုပ်ခြင်း၊
- (၂၄) အိမ်သုံးကုန်ပစ္စည်းများ ထုတ်လုပ်ခြင်း၊ (၂၅)
- လူသုံးကုန်ပစ္စည်းများ ထုတ်လုပ်ခြင်း၊
- ဓါတ်မြေဩစာ၊ ပိုးသတ်ဆေးနှင့် တိရိစ္ဆာန်အစားအစာများထုတ်လုပ်ခြင်း၊ (JS)
- (၂၂) ရေထွက်ကုန်ပစ္စည်းများအား ဖမ်းယူခြင်း၊ တာရှည်ခံအောင်ပြုပြင်ခြင်း၊ ကြိတ်ခွဲခြင်း၊ စည်သွပ်ခြင်းနှင့် ပြုပြင်ထုတ်လုပ်ခြင်း၊
- (၂၁) တိရိစ္ဆာန်မွေးမြူခြင်းနှင့် တိရိစ္ဆာန်ထွက်ကုန်ပစ္စည်းများအား ပြုပြင်ထုတ်လုပ်ခြင်း၊ စည်သွပ်ခြင်း၊
- တာရှည်ခံအောင်ပြုပြင်ခြင်းနှင့် အသားသေစေခြင်း၊
- (၂၀) (ကျွန်းမှအပ) သစ်နှင့် သစ်တောထွက်ပစ္စည်းများအား (သက်ဆိုင်ရာဌာန၏ ခွင့်ပြုချက်ဖြင့်) စုတ်လှဲခြင်း၊ထုတ်ယူခြင်း၊ ခွဲစိတ်ခြင်း၊ ကုန်ထုတ်လုပ်ခြင်း၊
- ကုန်ထုတ်လုပ်ခြင်း၊
- ရုံးသုံးပစ္စည်းများနှင့် ပညာရေးအထောက်အကူ ပစ္စည်းများ၊ လယ်ယာကိုင်းကျွန်းနှင့် ဥယာဉ်ခြံမြေထွက် ကုန်ပစ္စည်းများကို စိုက်ပျိုးခြင်း၊ ထုတ်လုပ်ခြင်း၊ ရိပ်သိမ်းခြင်း၊ တာရှည်ခံအောင်ပြုပြင်ခြင်း၊ ထုတ်ပိုးခြင်း၊ ကြိတ်ခွဲခြင်းနှင့် (၅၉)
- (ວຄ)
- (၁၇) စက္ကူ၊ စာရေးကိရိယာနှင့် ဓာတ်ပုံပစ္စည်းများ၊
- (၁၆) အထည်အလိပ်နှင့် အဝတ်အထည်များ၊
- (၁၅) စားသောက်ကုန်နှင့် အထွေထွေကုန်ပစ္စည်းများ၊
- (၁၄) ဆေးနှင့်ဆေးပစ္စည်းများ၊
- (၁၃) ကိရိယာတန်ဆာပလာအမျိုးမျိုး၊
- (၁၂) ယာဉ်နှင့်စက်ကိရိယာနှင့် အပိုပစ္စည်းများ၊
- (၁၁) လျှပ်စစ်နှင့်အီလက်ထရောနစ် ကုန်ပစ္စည်းများ၊
- (၁၀) ဆောက်လုပ်ရေးလုပ်ငန်းသုံး ပစ္စည်းများနှင့် သုတ်ဆေးများ
- $(\mathbf{c})$ လူသုံးကုန်ပစ္စည်းများ၊
- (റെ အိမ်သုံးကုန်ပစ္စည်းများ၊
- (<sub>7</sub>) စက်ရုံသုံးပစ္စည်းများနှင့် ကုန်ကြမ်းပစ္စည်းများ၊
- **(**6) ဓာတုဗေဒနှင့် ဓာတ်ဆေးဆိုးဆေးများ၊
- ဓါတ်မြေဩဇာနှင့် ပိုးသတ်ဆေးများ၊ (ე)
- (ç) ရေထွက်ကုန်ပစ္စည်းများ၊
- တိရစ္ဆာန်ထွက် ကုန်ပစ္စည်းနှင့် တိရစ္ဆာန်အစားအစာ (၃)
- သစ်တောထွက်ပစ္စည်းနှင့် ထပ်ဆင့်တိုးတန်ဖိုးမြင့် သစ်အခြေခံ ကုန်ပစ္စည်းများ၊ (J)
- လယ်ယာကိုင်းကျွန်းနှင့် ဥယာဉ်ခြံမြေထွက်ကုန်ပစ္စည်းများ (c)
- (၁) ကုမ္ပဏီမှဆောင်ရွက်မည့် လုပ်ငန်းရည်ရွယ်ချက်များမှာ-

အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာစုံလင်စွာပါသော ဖယားတွင် လက်မှတ်ရေးထိုးသူ ကျွန်ုပ်တို့ ကိုယ်စီကိုယ်ငှသည် ဤသင်းဖွဲ့မှတ်တမ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့်အလျောက် ကျွန်ုပ်တို့၏ အမည် အသီးသီးနှင့် ယှဉ်တွဲ ပြထားသော အစုရှယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည့်ဝင်ရယူကြရန် သဘောတူကြပါသည်။

| စဉ်  | အစုထည့်ဝင်သူများ၏အမည်၊<br>နေရပ်လိပ်စာနှင့် အလုပ်အကိုင်                                                                            | နိုင်ငံသားနှင့်အမျိုးသား<br>မှတ်ပုံတင်အမှတ် | ဝယ်ယူသော<br>အစုရှယ်ယာ<br>ဦးရေ | ထိုးမြဲ<br>လက်မှတ်<br>                                                |        |
|------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------|-----------------------------------------------------------------------|--------|
| C    | ဦး မောင်ကျေး (ခ) တီကာကွေး<br>ကုန်သည်<br>အမှတ်(စီ/၄)၊ ပင်ရွှေညောင်လမ်း၊<br>တာမွေကလေးရပ်ကွက်၊ တာမွေမြို့နယ်<br>ရန်ကုန်တိုင်းဒေသကြီး | ၁၂/လသန (နိုင်) ၀၁၈၁၇၄                       | 00000                         |                                                                       |        |
| J    | ဦး သန်းမြှင့် (စ) ခေါ်တင်အိန်<br>ကုန်သည်<br>အမှတ်(၄၅-အေ)၊ ပြည်လမ်း၊ ၁၁-ရပ်ကွက်၊<br>လှိုင်မြို့နယ် ရန်ကုန်တိုင်းဒေသကြီး            | ၁၂/လမတ(နိုင်) ၀၂၇၇၇၂                        | ooooc                         | M.                                                                    |        |
|      | နေ့စွဲ ၊ ၂၀၁၅ ခုနှစ်၊                                                                                                             | ၀၂ လ၊ ၀၄                                    | ရက်။                          | men                                                                   |        |
| အထက် | ၊ စိုးစိုးလား ရှိခြံများသည် ကျွန်ုပ်၏ရှေ့မှောက်တွင်                                                                               |                                             | B.Co<br>Registered            | Y Khin Win YA<br>om (A.A) C.P.A<br>Accountant, Au<br>acial Consultant | iditor |

မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ

အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည့် ကုမ္ပဏီ

# နေရှင်နယ် အင်ဖရာစထရက်ချာ ဟိုးလ်ဒင်း(စ်) ကုမ္ပဏီလီမိတက်

ର୍ଚ୍ଚା

သင်းဖွဲ့စည်းမျဉ်းများ

## $\diamond$ $\diamond$ $\diamond$ $\diamond$ $\diamond$ $\diamond$

၁။ ဤသင်းဖွဲ့စည်းမျဉ်းနှင့် လိုက်လျောညီထွေမဖြစ်သည့် စည်းမျဉ်းများမှအပ၊ မြန်မာနိုင်ငံကုမ္ပဏီများ အက်ဉပဒေ နောက်ဆက်တွဲ ပထမဇယားပုံစံ 'က 'ပါ စည်းမျဉ်းများသည် ဤကုမ္ပဏီနှင့် သက်ဆိုင် စေရမည်။ မြန်မာနိုင်ငံကုမ္ပဏီများ အက်ဉပဒပုဒ်မ ၁၇(၂)တွင် ဖော်ပြပါရှိသည့် မလိုက်နာ မနေရ စည်းမျဉ်း များသည် ဤကုမ္ပဏီနှင့် အစဉ်သဖြင့် သက်ဆိုင်စေရမည်။

# အများနှင့် မသက်ဆိုင်သော ကုမ္ပဏီ

- ၂။ ဤကုမ္ပဏီသည် အများနှင့်မသက်ဆိုင်သည့် ကုမ္ပဏီဖြစ်၍ အောက်ပါ သတ်မှတ်ချက်များသည် အကျိုး သက်ရောက် စေရမည်။
  - (က) ဤကုမ္ပဏီက ခန့်အပ်ထားသော ဝန်ထမ်းများမှအပ၊ ဤကုမ္ပဏီ၏ အစုရှင်် အရေအတွက်ကို ငါးဆယ် အထိသာ ကန့်သတ်ထားသည်။
  - (ခ) ဤကုမ္ပဏီ၏ အစုရှယ်ယာ သို့မဟုတ် ဒီဘင်ချာ သို့မဟုတ် ဒီဘင်ချာစတော့(ခ်) တစ်ခုခုအတွက် ငွေထည့်ဝင်ရန် အများပြည်သူတို့အား ကမ်းလှမ်းခြင်း မပြုလုပ်ရန် တားမြစ်ထားသည်။

# မ,တည် ရင်းနှီးငွေနှင့် အစုရှယ်ယာ

- ၃။
   ကုမ္ပဏီ၏ သတ်မှတ်မ,တည်ငွေရင်းမှာ ကျပ်မှာ
   ၃၀၀,၀၀၀,၀၀၀,၀၀၀
   /-(ကျပ်

   သန်းသုံးသိန်း
   တိတိ)ဖြစ်၍ ငွေကျပ်
   ၁၀၀,၀၀၀,၀၀၀
   /-(ကျပ်

   တစ်သိန်း
   တိတိ)တန်အစုရှယ်ယာပေါင်း
   ၃,၀၀၀,၀၀၀
   ခွဲထားပါသည်။

   ကုမ္ပဏီ၏ ရင်းနှီးငွေကို
   ကုမ္ပဏီ၏ စည်းမျဉ်းများနှင့်
   လက်ရှိတရားဝင်
   တည်ဆဲဖြစ်နေသော

   ပြဌာန်းချက်များ နှင့်အညီ အထွေထွေ သင်းလုံးကျွတ် အစည်းအဝေး၌ တိုးမြှင့်နိုင်ခွင့်၊ လျှော့ချနိုင်ခွင့်နှင့်
   ပြင်ဆင်နိုင်ခွင့်

   အာဏာ ရှိစေရမည်။
   ၂၀
   ၁၀
   ၁၀
- ၄။ မြန်မာနိုင်ငံကုမ္ပဏီများ အက်ဥပဒေပါ ပြဋ္ဌာန်းချက်များကို မထိခိုက်စေလျက် အစုရှယ်ယာများသည် ဒါရိုက်တာများ၏ ကြီးကြပ်ကွပ်ကဲမှု အောက်တွင် ရှိစေရမည်။ ၄င်းဒါရိုက်တာများသည် သင့်လျော်သော ပုဂ္ဂိုလ်များအား သတ်မှတ်ချက် အခြေအနေ တစ်စုံတစ်ရာဖြင့် အစုရှယ်ယာများကို ခွဲဝေချထားခြင်း သို့မဟုတ် ထုခွဲရောင်းချခြင်းတို့ကို ဆောင်ရွက်နိုင်သည်။
- ၅။ အစုရှယ်ယာလက်မှတ်များကို အထွေထွေမန်နေဂျာ သို့မဟုတ် ဒါရိုက်တာအဖွဲ့က သတ်မှတ်သည့် အခြား ပုဂ္ဂိုလ်များက လက်မှတ်ရေးထိုး၍ ကုမ္ပဏီ၏တံဆိပ်ရိုက်နှိပ်ထုတ်ပေးရမည်။ အစုရှယ်ယာ လက်မှတ်သည် ပုံပန်းပျက်ခြင်း၊ ပျောက်ဆုံးခြင်း သို့မဟုတ် ပျက်စီးခြင်းဖြစ်ပါက အဖိုးအခဖြင့် ပြန်လည်အသစ်ပြုလုပ်ပေးမှုကို သော်လည်းကောင်း၊ ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆသော အခြား သက်သေခံ အထောက်အထား တစ်စုံတစ်ရာကို တင်ပြစေ၍ သော်လည်းကောင်း ထုတ်ပေးနိုင်သည်။ ကွယ်လွန်သွားသော အစုရှယ်ယာရှင်တစ်ဦး၏ တရားဝင်ကိုယ်စားလှယ်ကို ဒါရိုက်တာများက အသိအမှတ်ပြုပေးရမည် ဖြစ်သည်။

ဒါရိက်တာများသည် အစုရှင်များက ၄င်းတို့၏ အစုရှယ်ယာများအတွက် မပေးသွင်းရသေးသော ငွေများကို အခါအားလျော်စွာ တောင်းဆိုနိုင်သည်။ အစုရှင်တိုင်းကလည်း ၄င်းတို့ထံတောင်းဆိုသည့် အကြိမ်တိုင်း အတွက် ဒါရိုက်တာများက သတ်မှတ်ထားသည့် ပုဂ္ဂိုလ်များထံ သတ်မှတ်သည့်အချိန်နှင့် နေရာတွင် ပေးသွင်းစေရန် တာဝန်ရှိစေရမည်။ ဆင့်ခေါ် မူတစ်ခုအတွက် အရစ်ကျပေးသွင်းစေခြင်း၊ သို့မဟုတ် ပယ်ဖျက်ခြင်း သို့မဟုတ် ရွှေ့ဆိုင်းခြင်းတို့ကို ဒါရိုက်တာများက သတ်မှတ်နိုင်သည်။

## ဒါရိက်တာမျာ**း**

၇။ သင်းလုံးကျွတ် အစည်းအဝေးက တစ်စုံတစ်ရာ သတ်မှတ်ပြဋ္ဌာန်းမှု မပြုလုပ်သမျှ ဒါရိက်တာများ၏ အရေ အတွက်သည် (၂၂) ဦးထက်မနည်း၊ (၅၀)ဦးထက်မများစေရ။ ပထမဒါရိုက်တာများသည်-

( ၁ ) ဦး မောင်ကျေး (ခ ) တီကာကွေး

## (၂) ဦး သန်းမြင့် (ခ) ခေါ် တင်အိန်

တို့ဖြစ်ကြပါသည်။

- ၈။ ဒါရိုက်တာများသည် ၄င်းတို့အနက်မှတစ်ဦးကို မန်နေဂျင်းဒါရိုက်တာအဖြစ် အချိန်အခါအလိုက် သင့်လျော်သော သတ်မှတ်ချက်များ၊ ဉာဏ်ပူဇော်ခများဖြင့် ခန့်ထားရမည်ဖြစ်ပြီး အခါအားလျော်စွာ ဒါရိုက်တာအဖွဲ့က ပေးအပ်သော အာဏာများ အားလုံးကို ၄င်းကအသုံးပြုနိုင်သည်။
- ၉။ ဒါရိက်တာတစ်ဦး ဖြစ်မြောက်ရန်လိုအပ်သော အရည်အချင်းသည် ကုမ္ပဏီ၏ အစုရှယ်ယာ အနည်းဆုံး ( )စု ကိုပိုင်ဆိုင်ခြင်းဖြစ်၍ ၄င်းသည် မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေပုဒ်မ ၈၅ ပါ ပြဋ္ဌာန်းချက် များကို လိုက်နာရန်တာဝန်ရှိသည်။
- ၁၀။ အစုရှယ်ယာများ လွှဲပြောင်းရန် တင်ပြချက်ကို မည်သည့် အကြောင်းပြချက်မျှ မပေးပဲ ဒါရိက်တာ အဖွဲ့သည် ၄င်းတို့၏ ပြည့်စုံ၍ ချုပ်ချယ်ခြင်းကင်းသော ဆင်ခြင်တွက်ဆမှုဖြင့် မှတ်ပုံတင်ရန် ငြင်းဆိုနိုင်သည်။

# ဒါရိုက်တာများ၏ ဆောင်ရွက်ချက်များ

- ၁၁။ ဒါရိုက်တာများသည်၄င်းတို့သင့်လျော်သည် ထင်မြင်သည့်အတိုင်း လုပ်ငန်းဆောင်ရွက်ရန် တွေ့ဆုံ ဆွေးနွေးခြင်း၊ အစည်းအဝေးရွှေ့ဆိုင်းခြင်း၊ အချိန်မှန်စည်းဝေးခြင်း၊ အစည်းအဝေးအထမြောက်ရန် အနည်းဆုံး ဒါရိုက်တာဦးရေ သတ်မှတ်ခြင်းတို့ကိုဆောင်ရွက်နိုင်သည်။ ယင်းသို့ မသတ်မှတ်ပါက ဒါရိုက်တာနှစ်ဦး တက်ရောက်လျှင် အစည်းအဝေးထမြောက်ရမည်။ အစည်းအဝေးတွင် မည်သည့် ပြဿနာမဆို ပေါ်ပေါက်ပါက မန်နေးဂျင်းဒါရိုက်တာ၏ အဆုံးအဖြတ်သည် အတည်ဖြစ်ရမည်။ မည်သည့်ကိစ္စများကိုမဆို မဲခွဲဆုံးဖြတ်ရာတွင် မဲအရေအတွက်တူနေပါက သဘာပတိသည် ဒုတိယမဲ သို့မဟုတ် အနိုင်မဲကို ပေးနိုင်သည်။
- ၁၂။ ဒါရိုက်တာများ၏အစည်းအဝေးကို မည်သည့်ဒါရိုက်တာကမဆို အချိန်မရွေး ခေါ်နိုင်သည်။
- ္ဘ၃။ ဒါရိုက်တာအားလုံးက လက်မှတ် ရေးထိုးထားသော ရေးသားထားသည့် ဆုံးဖြတ်ချက် တစ်ရပ်သည် နည်းလမ်းတကျ ခေါ် ယူ ကျင်းပသော အစည်းအဝေးက အတည်ပြုသည့် ဆုံးဖြတ်ချက် ကဲ့သို့ပင် ကိစ္စ အားလုံး အတွက် အကျိုးသက် ရောက်စေရမည်။

ဒါရိက်တာများ၏ လုပ်ပိုင်ခွင့်နှင့် တာဝန်များ

၁၄။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ နောက်ဆက်တွဲဇယားပုံစံ (က )ပါ စည်းမျဉ်းအပိုဒ် ၇၁ တွင် ပေးအပ် ထားသော အထွေထွေ အာဏာများကို မထိခိုက်စေဘဲ ဒါရိုက်တာများသည် အောက်ဖော်ပြပါ အာဏာများ ရှိရမည်ဟု အတိအလင်း ထုတ်ဖော်ကြေငြာသည်။ အာဏာဆိုသည်မှာ -

- (၁) ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆသော တန်ဖိုးနှင့် စည်းကမ်းများ ၊ အခြေအနေ များ သတ်မှတ်၍ ကုမ္ပဏီက ရယူရန် အာဏာရှိသည့် မည်သည့်ပစ္စည်း ၊ အခွင့်အရေးများ၊ အခွင့်အလမ်းများ မဆို ဝယ်ယူရန် သို့မဟုတ် အခြားနည်းလမ်းများဖြင့် ရယူပိုင်ဆိုင်ရန် အပြင် ကုမ္ပဏီက ပိုင်ဆိုင်ခွင့်ရှိသော မည်သည့်ပစ္စည်း၊ အခွင့်အရေးများ ၊ အခွင့်အလမ်း များကိုမဆို သင့်တော်သော စည်းကမ်းချက်များသတ်မှတ်၍ ရောင်းချခြင်း၊ အငှားချခြင်း ၊ စွန့်လွှတ်ခြင်း သို့မဟုတ် အခြားနည်းလမ်းများဖြင့် ဆောင်ရွက် ခြင်းတို့ကို ပြုလုပ်ရန် ။
- (၂) သင့်လျော်သော စည်းကမ်းသတ်မှတ်ချက်များဖြင့် ငွေကြေးများကို ချေးငှားရန် သို့မဟုတ် အဆိုပါ ချေးငှားသော ငွေကြေးများကို ပြန်လည်ပေးဆပ်ရန် အတွက်အာမခံများ ထားရှိ ရန် အပြင်၊ အထူးသဖြင့် ဤ ကုမ္ပဏီ၏ ဒီဘင်ချာများ ၊ ဒီဘင်ချာစတော့ပ်များ ၊ ခေါ်ယူခြင်းမပြုရသေးသော ရင်းနှိ**းငွေများ အပါအဝင် ယခုလက်ရှိ နှင့် နောင်ရှိမည့်** ပစ္စည်းများအားလုံး သို့မဟုတ် တစ်စိတ်တဒေသ ကို အပေါင်ပြု၍ ထုတ်ဝေရန် ။
- ဤကုမ္ပဏီက ရယူထားသော အခွင့်အရေးများ သို့မဟုတ် ဝန်ဆောင်မှုများ အားလုံး သို့မဟုတ် (ç) တစ်စိတ်တစ်ဒေသကို ငွေကြေးအားဖြင့် ပေးချေရန်၊ သို့မဟုတ် အစုရှယ်ယာ 9p:1 ငွေချေးစာချုပ်များ ၊ သို့မဟုတ် ဒီဘင်ချာများ သို့မဟုတ် ဤကုမ္ပဏီ၏ အခြားသော အာမခံ စာချုပ်များကိုထုတ်ပေးရန်၊ ထိုအပြင် အဆိုပါအစုရှယ်ယာများ ထုတ်ပေးရာ၌ ငွေအပြည့်ပေးသွင်းပြီး သော အစုရှယ်ယာအနေဖြင့် သော်လည်းကောင်း ၊ တစ်စိတ်တစ်ဒေသ ပေးသွင်းပြီးသော အစုရှယ်ယာများ အနေဖြင့် သော် လည်းကောင်း ၊သဘောတူညီ သကဲ့သို့ ထုတ်ဝေပေးရန်နှင့် အဆိုပါ ငွေချေးစာချုပ်များ ၊ ဒီဘင်ချာများ သို့မဟုတ် ကုမ္ပဏီ၏ အခြားသော အာမခံ စာချုပ်များဖြင့် ထုတ်ဝေပေးရာ၌ ခေါ်ဆိုခြင်း မပြုရသေးသော ရင်းနှီးငွေများ အပါအဝင် ဤကုမ္ပဏီ၏ ပစ္စည်းအားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို အပေါင်ပြု၍ ဖြစ်စေ ၊ ထိုကဲ့သို့ မဟုတ်ဘဲ ဖြစ်စေ ထုတ်ပေးရန်။
- (၄) ဤကုမ္ပဏီနှင့် ပြုလုပ်ထားသော ကန်ထရိုက်စာချုပ်များ ၊ တာဝန်ယူထားသည့် လုပ်ငန်း များ ပြီးစီးအောင် ဆောင်ရွက်ခြင်း အလို့ငှာ ခေါ်ယူခြင်းမပြုရသေးသော ရင်းနှီးငွှေများ အပါအဝင်ဤကုမ္ပဏီ၏ပစ္စည်းရပ်များအားလုံးသို့မဟုတ်တစ်စိတ်တစ်ဒေသကို ပေါင်နှံ၍ သော် လည်းကောင်း၊ အပေါင်ပြု၍သော် လည်းကောင်း ၊ သို့မဟုတ် အစုရှယ်ယာများ အတွက် ငွေများတောင်းခံခေါ်ယူ၍သော်လည်းကောင်း၊ ခွင့်ပြုရန် သို့မဟုတ် သင့်လျော် သည့် အတိုင်း ဆောင်ရွက်ရန် ။
- (၅) မန်နေဂျာများ ၊ အတွင်းရေးမှူးများ အရာရှိများ ၊ စာရေးများ ၊ ကိုယ်စားလှယ်များနှင့် ဝန်ထမ်း များကို အမြဲ တမ်းယာယီ သို့မဟုတ် အထူးကိစ္စရပ်များအတွက် ခန့်ထားခြင်း ၊ ရပ်စဲခြင်း၊ဆိုင်းငံ့ခြင်းများအတွက် လည်းကောင်း ၊အဆိုပါပုဂ္ဂိုလ်တို့၏ တာဝန်များ၊ အာဏာများ ၊ လစာငွေများ ၊ အခြားငွေကြေးများကို သတ်မှတ်ရာ၌ လည်းကောင်း ၊ အာမခံပစ္စည်းများ တောင်းခံရာ၌ လည်းကောင်း သင့်လျော်သလို ဆောင် ရွက်ရန် ၊ ထို့အပြင် အဆိုပါကိစ္စများ အတွက် ကုမ္ပဏီ၏ မည့်သည့်အရာရှိကိုမဆို ကိစ္စရပ်များ အားလုံးကို ဖြစ်စေ ၊ တစ်စိတ်တစ်ဒေကို ဖြစ်စေ ဒါရိုက်တာများ၏ ကိုယ်စား ဆောင်ရွက်နိုင်ရေးအတွက် တာဝန်လွှဲအပ် ရန် ။
- (၆) ဤ ကုမ္ပဏီ၏ ဒါရိုက်တာ တစ်ဦးအား ဒါရိုက်တာရာထူးနှင့် တွဲဖက်၍ မန်နေးဂျင်း ဒါရိုက်တာ၊ အထွေထွေ မန်နေဂျာ ၊ အတွင်းရေးမှူး သို့မဟုတ် ဌာနခွဲမန်နေဂျာ အဖြစ် ခန့်ထားရန် ။

ს

- (၇) မည်သည့်အစုရှင် ထံမှမဆို ၄င်းတို့ ၏ အစုရှယ််ယာများ အားလုံးကို ဖြစ်စေ ၊ အချို့အဝက်ကို ဖြစ်စေ စွန့်လွှတ်ခြင်းအား သဘောတူညီသော စည်းကမ်းချက်များဖြင့် လက်ခံရန် ။
- (၈) ဤ ကုမ္ပဏီက ပိုင်ဆိုင်သော သို့မဟုတ် ပိုင်ဆိုင်ခွင့်ရှိသော သို့မဟုတ် အခြား အကြောင်းများ ကြောင့် ဖြစ်သော မည်သည့်ပစ္စည်းကိုမဆို ကုမ္ပဏီ၏ ကိုယ်စား လက်ခံထိန်းသိမ်းထားရန် အတွက် မည်သည့် ပုဂ္ဂိုလ် သို့မဟုတ်ပုဂ္ဂိုလ်များကို မဆို ခန့်ထားရန်နှင့်အဆိုပါ ယုံမှတ် အပ်နံခြင်းများနှင့် ပတ်သက်၍ လိုအပ်သော စာချုပ် စာတမ်း များ ချုပ်ဆို ပြုလုပ်ရန် ။
- စပ်လျဉ်း၍ ဤကုမ္ပဏီကပြုလုပ်သော ဤကုမ္ပဏီ၏ အရေးအရာများနှင့် (၉) သို့မဟုတ် ဤကုမ္ပဏီပေါ် သို့မဟုတ် ဤကုမ္ပဏီ၏အရာရှိများအပေါ် ပြုလုပ်သော တရားဥပဒေအရ စွဲဆိုဆောင်ရွက်မှုများကို တရားစွဲဆို ၊အရေးယူ ၊ခုခံကာကွယ်ရန် သို့မဟုတ်ခွင့်လွှတ်ရန် ၊ ဤကုမ္ပဏီက ရရန်ရှိသော ကြွေးမြိများနှင့် ဤကုမ္ပဏီအပေါ်တောင်းခံသော ထိုအပြင် ပေးဆပ်ရန် အချိန်ကာလရွှေ့ဆိုင်းခွင့်ပြုခြင်း သို့မဟုတ် ဂြွေးမြီးများနှင့်ပတ်သက်၍ နှစ်ဦးနှစ်ဖက်သဘောတူ ကျေအေးခြင်းများ ပြုလုပ်ရန် ။
- (၁၀) ဤကုမ္ပဏီက ပေးရန်ရှိသော သို့မဟုတ်ရရန် ရှိသောငွေတောင်းခံခြင်းများကို ဖြန်ဖြေရေး ခုံသမာဓိထံသို့ဖြေရှင်းရန်အတွက် အပ်ိနှံရန်အပြင် ဖြန်ဖြေရေးခုံသမာဓိ၏ ဆုံးဖြတ်ချက် အတိုင်း လိုက်နာဆောင်ရွက်ရန်။
- (၁၁) ဤကုမ္ပဏီက ရရန်ရှိသော တောင်းဆိုချက်၊ တောင်းခံချက်များနှင့် ကုမ္ပဏီသို့ ပေးရန် ရှိသော ငွေကြေးများအတွက် ပြေစာများပြုလုပ်ခြင်း၊ လျှော်ပစ်ခြင်းနှင့် အခြားသော နည်းဖြင့် စွန့်လွှတ်ခြင်းများကို ပြုလုပ်ရန်။
- (၁၂) လူမွဲစာရင်းခံရခြင်း၊ကြွေးမြီးမဆပ်နိုင်ခြင်းကိစ္စများနှင့် ပတ်သက်၍ ဤကုမ္ပဏီ၏ ကိုယ်စား ဆောင်ရွက်ရန်။
- (၁၃) ငွေလွှဲစာတမ်းများ၊ချက်လက်မှတ်များ၊ဝန်ခံကတိစာချုပ်များ ၊ ထပ်ဆင့်လက်မှတ်ရေးထိုး ခြင်းများ၊ လျှော်ပစ်ခြင်းများ၊ ကန်ထရိုက်စာချုပ်များနှင့် စာရွက်စာတမ်းများကို ကုမ္ပဏီ၏ ကိုယ်စား မည်သူက လက်မှတ်ရေးထိုးခွင့် ရှိသည်ကို စိစစ်သတ်မှတ်ရန်။
- (၁၄) ဒါရိုက်တာများက သင့်လျော်သည်ဟု <mark>ယူဆပါက သင့်</mark>လျော်လျှောက်ပတ်သော နည်းလမ်းများဖြင့် လတ်တလော အသုံးပြုရန် မလိုသေးသော ကုမ္ပဏီပိုင်ငွေများကို အာမခံပစ္စည်းပါသည်ဖြစ်စေ၊ မပါသည်ဖြစ်စေ ရင်းနှီးမြှုပ်နှံမှုထားရန်နှင့် စီမံခန့်ခွဲထား ရန်၊ ထိုအပြင် အချိန်ကာလ အားလျော်စွာ မြှုပ်နှံထား သောငွေများကိုပြန်လည် ရယူရန်နှင့် ပြင်ဆင်ပြောင်းလွှဲရန် ။
- (၁၅) ဤ ကုမ္ပဏီ၏ အကျိုးအတွက် ငွေကြေးစိုက်ထုတ် ကုန်ကျခံထားသော ဒါရိုက်တာ သို့မဟုတ် အခြား ပုဂ္ဂိုလ်များက ကုမ္ပဏီ၏ (လက်ရှိနောင်တွင်ရှိမည့်) ပစ္စည်းများကို ဤကုမ္ပဏီ၏ အမည်ဖြင့်ဖြစ်စေ၊ ဤကုမ္ပဏီ၏ ကိုယ်စားဖြစ်စေ ပေါင်နှံခြင်းများကို သင့်လျော်သည်ဟု ယူဆပါကဆောင်ရွက်ခွင့်ပြုရန် အဆိုပါပေါင်နှံခြင်းဆိုရာ၌ ရောင်းချ နိုင်သည့် အာဏာနှင့် အခြားသော သဘောတူညီထားသည့် တရားဝင်သဘောတူညီချက်များနှင့် ဥပဒေ ပြဌာန်း ချက်များ ပါပါဝင်သည်။
- (၁၆) ဤကုမ္ပဏီက ခန့်အပ်ထားသော မည်သည့်အရာရှိ သို့မဟုတ် ပုဂ္ဂိုလ်ကိုမဆို အတိအကျ ဆောင်ရွက်ခဲ့သောလုပ်ငန်း သို့မဟုတ် ဆောင်ရွက်မှုတစ်ခုအတွက်ရရှိသော အမြတ်ငွေမှ ကော်မရှင်ပေးခြင်းသို့မဟုတ်ကုမ္ပဏီ၏အထွေထွေအမြတ်အစွန်းမှ ခွဲဝေပေးခြင်းများ ပြုလုပ်ရန် နှင့် အဆိုပါကော်မရှင်များ အမြတ်များ ခွဲဝေပေးခြင်းစသည်တို့ကို ဤကုမ္ပဏီ၏ လုပ်ငန်းကုန်ကျ စရိတ် တစ်စိတ်တစ်ဒေသ အဖြစ် သတ်မှတ်ရန်။

- (၁၇) ဤ ကုမ္ပဏီ၏ လုပ်ငန်းများ အရာရှိများ ဝန်ထမ်းများနှင့် အစုရှင်များအတွက် ထုတ်ပြန် ထားသော စည်းမျဉ်းများ၊ စည်းကမ်းချက်များ ၊ စည်းကမ်းဥပဒေများကို အခါ အားလျော်စွာ သတ်မှတ်ခြင်း ၊ ပြင်ဆင်ခြင်း ၊ ဖြည့်စွက်ခြင်း များ ဆောင်ရွက်ရန် ။
- (၁၈) ဤ ကုမ္ပဏီ၏ လုပ်ငန်းအတွက် ဤကုမ္ပဏီ အမည်ဖြင့်ဖြစ်စေ ၊ ဤကုမ္ပဏီ၏ ကိုယ်စားဖြစ်စေ လိုအပ်သည် ဟု ယူဆလျှင် ညှိနှိုင်းဆွေးနွေးခြင်းနှင့် ကန်ထရိုက်စာချုပ် ချုပ်ဆိုခြင်းများ ကို ပြုလုပ်ရန် ၊ ဖျက်သိမ်းရန်နှင့် ပြင်ဆင်ရန် အပြင် အဆိုပါ ဆောင်ရွက်ချက် စာချုပ်များနှင့် ကိစ္စရပ်များကို လည်းကောင်း ၊ ၄င်းတို့နှင့် စပ်လျဉ်း သော ကိစ္စရပ်များကို လည်းကောင်း လုပ်ကိုင်ဆောင်ရွက်ရန် ။
- (၁၉) ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆပါက ကုမ္ပဏီ၏ စီးပွားရေးလုပ်ငန်းတွင် အကျိုးရှိစေရန် အတွက် မည်သည့် ပြည်တွင်းပြည်ပပုဂ္ဂိုလ်၊ စီးပွားရေးအဖွဲ့အစည်းများ၊ ကုမ္ပဏီသိုမဟုတ်ဘဏ် သို့မဟုတ် ငွေကြေးအဖွဲ့အစည်း ထံမှ မဆို ငွေချေးယူရန် ။

# အထွေထွေ အစည်းအဝေးကြီးများ

ကုမ္ပဏီကို ဥပဒေအရ ဖွဲ့စည်းတည်ထောင်ပြီးသည် နေ့မှ တစ်ဆယ့်ရှစ်လအတွင်း အထွေထွေ ၁၅။ သင်းလုံးကျွတ် အစည်းအဝေးကြီးကို ကျင်းပရမည်။ ထို့နောက် ဒါရိုက်တာအဖွဲ့က သတ်မှတ်ပေး သည် အချိန်နှင့် နေရာများတွင် ပြက္ခဒိန်နှစ် တစ်နှစ်လျှင် အနည်းဆုံး တစ်ကြိမ် (နောက်ဆုံး ကျင်းပသည့် အထွေထွေအစည်း အဝေးကြီးနှင့် တစ်ဆယ့်ငါးလထက် မပိုသည့် အချိန်၌ ) ကျင်းပရမည်။ သင်းလုံးကျွတ် အစည်းအဝေး စတင်၍ လုပ်ငန်းအတွက် ဆွေးနွေးချိန်တွင် အစည်းအဝေးအထမြောက်ရန် မတက်ရောက်သော သတ်မှတ်သည့် အတွက် မည်သည့်သင်းလုံးကျွတ် အစုရင် အရေ အစည်းအဝေးတွင်မဆို လုပ်ငန်းနှင့် ပတ်သက်၍ ဆုံးဖြတ် ဆောင်ရွက်ခြင်း မပြုရ ၊ ဤတွင် အခြားနည်းသတ်မှတ် ပြဋ္ဌာန်းခြင်း မရှိလျှင်ထုတ်ဝေထားသည့် မ,တည်ရင်းနှီးငွေ အစုရှယ်ယာများ၏ ငါးဆယ်ရာခိုင်နှုန်းထက် မနည်း ပိုင်ဆိုင်ကြသည့် (နှစ်ဦးထက် မနည်းသော) အစုရှင်များကိုယ်တိုင် တက်ရောက်လျှင် လုပ်ငန်းကိစ္စ အားလုံး ဆောင်ရွက်ရန် အတွက် အစည်းအဝေး အထမြောက်သည့် ဦးရေ ဖြစ်သည်။ အကယ်၍ ကုမ္ပဏီတွင် အစုရှင် အရေအတွက် နှစ်ဦးတည်းသာရှိသည့် ကိစ္စတွင်မူ ထိုနှစ်ဦးတည်း သည်ပင်လျှင် အစည်းအဝေး အထမြောက်ရန် သတ်မှတ်သည် အရေအတွက် ဖြစ်စေ ရမည်။

# အမြတ်ဝေစုမျာ**း**

၁၆။ သင်းလုံးကျွတ် အစည်းအဝေးတွင် ဤကုမ္ပဏီ၏အစုရှင်များအား ခွဲဝေပေးသည့် အမြတ်ဝေစုကို ကြေငြာ ရမည်။ သို့ရာတွင် အမြတ်ဝေစုသည် ဒါရိုက်တာများက ထောက်ခံသော ငွေပမာဏထက် မကျော်လွန် စေရ။ သက်ဆိုင်ရာနှစ်၏ အမြတ်ပမာဏ သို့မဟုတ် အခြားမခွဲဝေ ရသေးသည့် အမြတ်ပမာဏမှအပ အမြတ် ဝေစုကို ခွဲဝေမပေးရ ။

## ရုံးဝန်ထမ်းများ

၁၇။

ကုမ္ပဏီသည် လုပ်ငန်းတစ်ခုကို ဖွင့်လှစ်၍ဆောင်ရွက်မည်ဖြစ်ပြီး အရည်အချင်းပြည့်မှီသူ ပုဂ္ဂိုလ် တစ်ဦးအား အထွေထွေ မန်နေဂျာအဖြစ် ခန့်အပ်ရန်နှင့် အခြားအရည်အချင်း ပြည့်မှီသူများ အား ရုံးဝန်ထမ်းများအဖြစ် ခန့်အပ်မည်ဖြစ်သည်။ လစာ ၊ ခရီးသွားလာစရိတ် နှင့် အခြား အသုံးစရိတ်များကဲ့ သို့သော ဉာဏ် ပူဇော်ခ များနှင့် အခကြေးငွေများကို ဒါရိုက်တာအဖွဲ့က သတ်မှတ်မည်ဖြစ်ပြီး ၄င်း သတ်မှတ်ချက်များကို သင်းလုံးကျွတ် အစည်းအဝေးက အတည်ပြု ရမည်။ အတွေထွေမန်နေဂျာသည် လုပ်ငန်းရုံး၏ ထိရောက်စွာ လုပ်ငန်းလည်ပတ်မှု အားလုံး အတွက် တာဝန်ရှိစေရမည်ဖြစ်ပြီး ငွေစာရင်းများ

- ၁၈။ ဒါရိုက်တာများသည် သင့်လျော်သည့် ငွေစာရင်းစာအုပ်များကိုအောက်ဖော်ပြပါသတ်မှတ်ချက်များ နှင့် အညီ ထားသို ထိန်းသိမ်းဆောင်ရွက်သွားရမည် ။
  - (၁) ကုမ္ပဏီ၏ ရငွေ၊ သုံးငွေများ၏ ပမာဏနှင့် ၄င်းရငွေ ၊ သုံးငွေများ ဖြစ်ပေါ်ခြင်းနှင့် စပ်လျဉ်းသည့် အကြောင်း ကိစ္စများ ။
  - (၂) ကုမ္ပဏီ ၏ ကုန်ပစ္စည်းများ ရောင်းချခြင်းနှင့် ဝယ်ယူခြင်းများ။
  - (၃) ဤ ကုမ္ပဏီ၏ ရရန် ပိုင်ခွင့် နှင့် ပေးရန် တာဝန်များ။

၁၉။ ငွေစာရင်းစာအုပ် အားလုံးကို ဤကုမ္ပဏီ၏ မှတ်ပုံတင်ထားသော လုပ်ငန်းရုံးများ သို့မဟုတ် ဒါရိုက်တာများက သင့်လျော်သည်ဟု ထင်မြင်ယူဆသော အခြားနေရာများတွင် သိမ်းဆည်း ထားရမည်ဖြစ်ပြီး ၊ ရုံးချိန် အတွင်း၌ ဒါရိုက်တာများက စစ်ဆေးနိုင်ရန် ပြသထားရမည်။

စာရင်းစစ်

၂၀။ စာရင်းစစ်များကိုခန့်အပ်ထားရမည်။ ၄င်းစာရင်းစစ်များ၏တာဝန်သည် မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ သို့မဟုတ် အခါအားလျော်စွာ ပြင်ဆင်သတ်မှတ်သည့် စည်းမျဉ်း စည်းကမ်း များနှင့် လိုက်လျော ညီထွေ ဖြစ်ရမည်။

# နို့တစ်စာ

၂၁။ ဤကုမ္ပဏိသည် မည်သည့်အစုရှင်ထံသို့မဆို နို့တစ်စာကို လက်ရောက်ပေးအပ်ခြင်း သို့မဟုတ် နို့တစ်စာပါသော စာကိုစာတိုက်ခ ကြိုတင်ပေးထား၍ ၄င်းအစုရှင်ထံ မှတ်ပုံတင်လိပ်စာအတိုင်း စာတိုက်မှ တဆင့်လိပ်မူပေးပို့ခြင်းအားဖြင့် ပေးပို့နိုင်ပါသည်။

တံဆိပ်

၂၂။ ဒါရိက်တာများသည် တံဆိပ်ကို လုံခြုံစွာ ထိန်းသိမ်းထားရန်အတွက် စီမံဆောင်ရွက်ရမည်။ ထိုတံဆိပ်ကို ဒါရိက်တာများကကြိုတင်ပေး အပ်ထားသည့် ခွင့်ပြုချက်ဖြင့်မှတပါး၊ ထို့အပြင် အနည်းဆုံး ဒါရိက်တာ တစ်ဦး ရှေ့မှောက်တွင်မှတပါး မည်သည့်အခါမျှ မသုံးရ။ တံဆိပ်ရိုက်နှိပ် ထားသည့် စာရွက်စာတမ်း တိုင်းတွင် ထိုဒါရိုက်တာက လက်မှတ်ရေးထိုးရမည်။

# လျော်ကြေး

၂၃။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေပုပ်မ ၈၆(ဂ) တွင် ဖေါ်ပြပါရှိသည့် ပြဌာန်းချက်များ၊ လက်ရှိတရားဝင် တည်ဆဲဥပဒေ ပြဌာန်းချက်များနှင့် မဆန့်ကျင်စေဘဲ ကုမ္ပဏီ၏ဒါရိုက်တာ၊ စာရင်းစစ်၊ အတွင်းရေးမှူး သို့မဟုတ် အခြာအရာရှိတစ်ဦးဦးမှာ မိမိတာဝန်ဝတ္တရားများကို ဆောင်ရွက်ရာ၌ဖြစ်စေ ထိုတာဝန် ဝတ္တရားများနှင့် စပ်လျဉ်း၍ဖြစ်စေ ကျခံခဲ့သည့်စရိတ်များ၊ တောင်းခံငွေများ ၊ဆုံးရှုံးငွေများ၊ ကုန်ကျငွေ များ နှင့် ကြွေးမြီးတာဝန်များအတွက် ကုမ္ပဏီထံမှ လျော်ကြေးရထိုက်ခွင့်ရှိစေရမည်။

# ဖျက်သိမ်းခြင်း

၂၄။ ကုမ္ပဏီ၏ အထွေထွေ အစည်အဝေး ဆုံးဖြတ်ချက်ဖြင့် ကုမ္ပဏီအား ဖျက်သိမ်း နိုင်သည်။ ယင်းသို့ ဖျက်သိမ်းရာတွင် မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေများနှင့် ယင်းဥပဒေများအား အခါအားလျော်စွာ ပြင်ဆင် ပြောင်းလဲထားသည့် တရားဥပဒေများတွင် ပါဝင်သည့် စည်းမျဉ်းများအတိုင်း လိုက်နာပြုလုပ် ရမည်။ အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာစုံလင်စွာပါသော ဖယားတွင် လက်မှတ်ရေးထိုးသူ ကျွန်ုပ်တို့ ့ကိုယ်စီကိုယ်ငှသည် ဤသင်းဖွဲ့စည်းမျဉ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့်အလျောက် ကျွန်ုပ်တို့၏ အမည် အသီးသီးနှင့် ယှဉ်တွဲ ပြထားသော အစုရှယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည့်ဝင်ရယူကြရန် သဘောတူကြပါသည်။

| စဉ်  | အစုထည့်ဝင်သူများ၏ အမည်၊<br>နေရပ်လိပ်စာနှင့် အလုပ်အကိုင်                                                                           | နိုင်ငံသားနှင့်အမျိုးသား<br>မှတ်ပုံတင်အမှတ် | ဝယ်ယူသော<br>အစုရှယ်ယာ<br>ဦးရေ | ထိုးမြဲ<br>လက်မှတ်                                            |
|------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------|---------------------------------------------------------------|
| Э    | ဦး မောင်ကျေး (ခ) တီကာကွေး<br>ကုန်သည်<br>အမှတ်(စီ/၄)၊ ပင်ရွှေညောင်လမ်း၊<br>တာမွေကလေးရပ်ကွက်၊ တာမွေမြို့နယ်<br>ရန်ကုန်တိုင်းဒေသကြီး | ၁၂/လသန (နိုင်) ဂ၁၈၁၇၄                       | 00000                         |                                                               |
| J    | ဦး သန်းမြင့် (ခ) ခေါ်တင်အိန်<br>ကုန်သည်<br>အမှတ်(၄၅-အေ)၊ ပြည်လမ်း၊ ၁၁-ရပ်ကွက်၊<br>လှိုင်မြို့နယ် ရန်ကုန်တိုင်းဒေသကြီး             | ၁၂/လမတ(နိုင်) ၀၂၇၇၇၂                        | 00000                         | A.                                                            |
|      | နေ့စွဲ ၊ ၂၀၁၅ ခုနှစ်၊                                                                                                             | ၀၂ လ၊ ၀၄                                    | ရက်။ <sub>Dav</sub>           | w Khin Win Yi                                                 |
| အထက် | မှေ့နှ<br>ဂ်ပါလက်မှတ်ရှင်များသည် ကျွန်ုပ်၏ ရှေ့မှောက်တွင်                                                                         |                                             | B.C<br>Registere              | com (A.A) C.P.A<br>d Accountant, Auditor<br>ancial Consultant |

#### THE MYANMAR COMPANY ACT

### PRIVATE COMPANY LIMITED BY SHARES

### **Memorandum Of Association**

OF

# NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED

 $\diamond \ \diamond \ \diamond \ \diamond \ \diamond \ \diamond$ 

I. The name of the Company is

#### NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED

II. The registered office of the Company will be situated in the Union of Myanmar.

III. The liability of the members is limited.

IV.The authorised capital of the Company is Ks-<br/>Three Hundred Thousand Million300,000,000,000/-(Kyatsshares of Ks.100,000.00/-(KyatsOne Hundred ThousandOnly )

each, with power in General Meeting either to increase, reduce or alter such capital from time to time in accordance with the regulations of the Company and the legislative provisions for the time being in force in this behalf.

### V. The Objective For Which The company is established are

- 1. Trading of Agricultural and farm produces.
- 2. Trading of Forest products and value-added wood-based products.
- 3. Trading of Animal by-products and Animal feed.
- 4. Trading of Marine products.
- 5. Trading of Fertilizer and insecticides.
- 6. Trading of Chemicals and dyes.
  - 7. Trading of Factory utencils and raw material.
  - 8. Trading of Household goods.
  - 9. Trading of Personal goods.
  - 10. Trading of Construction materials and paints.
  - 11. Trading of Electrical and electronic products.
  - 12. Trading of Vehicles, Machinery and spares.
  - 13. Trading of Tools and implement.
  - 14. Trading of Medicines and medical equipment.
  - 15. Trading of Foodstuff and general merchandise.
  - 16. Trading of Textile and garment.
  - 17. Trading of Paper, stationery and photographic stores.
  - 18. Trading of Office equipment and educational supplies.
  - 19. Growing, producing, harvesting, preserving, packing, milling and manufacturing of agricultural and farm products.
  - 20. Felling, extracting (with the permission from the authorities concerned) milling, manufacturing, preserving and seasoning of timber(excluding-teak) and forest products.
  - 21. Livestock breeding, processing and canning of livestock products.
  - 22. Finishing, preserving, milling, canning and processing of marine products.
  - 23. Producing fertilizers, insecticides and animal feeds.
  - 24. Manufacturing of personal goods.
  - 25. Manufacturing of household goods.
  - 26. Manufacturing of vehicles, machineries and spares.
  - 27. Manufacturing of arts and crafts, lacquerwares and furniture.
  - 28. Manufacturing of construction materials and paints.
  - 29. Manufacturing of factory utencils.
  - 30. Manufacturing of electrical and electronic goods.
  - 31. Manufacturing of textile, garments and clothing.
  - 32. To carry on the business of explanation, exploitation, production, processing of minerals and marketing of its products with the permission of the Government.
  - 33. All kinds of agency business, technical consultants, business consultants, management consultants and advisory services.
  - 34. Advertising and its agency business.
  - 35. Business of entertainments and related activities.
  - 36. Business of all kinds of medical services.
  - 37. Business of transportation (except railways and airways)
  - 38. Business of printing and publishing.
  - 39. Business of surveying and inspection.
  - 40. Business of feasibility study on new projects, projects formulation, project appraisal and project evaluation.
  - 41. Business of Account writing, Auditing and legal advisory services.
  - 42. Business of servicing, maintenance of repairing of all kinds of vehicles and machines.
  - 43. Business of installation, maintenance and renovation of electrical and electronic goods.
  - 44. Consturuction
  - 45. Gems
  - 46. Travels & Tours
  - 47. Hotel
  - 48. Macro Finance And Financial Services
  - 49. Business of all kinds of educational Services

VI. To borrow money for the benefit of the Company's business from any person, firm, company, bank or financial organization in the manner that the Company shall think fit.

**PROVISO:** Provided that the Company shall not exercise any of the above objects whether in the Union of Myanmar or elsewhere, save in so for as it may be entitled so as to do in accordance with the Laws, Orders and Notifications in force from time to time and only subject to such permission and or approval as may be prescribed by the Laws, Orders and Notifications of the Union of Myanmar for the

We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the Capital of the Company set opposite our respective names.

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| Sr. No.   | Name, Address and<br>Occupation of Subscribers                                  | Nationality &<br>N.R.C No. | Number of<br>Shares<br>taken | Signatures  |
|-----------|---------------------------------------------------------------------------------|----------------------------|------------------------------|-------------|
| 1         | U Maung Kyay @ Tee Kar Kway                                                     | 12/LATHANA(NAING)018174    | 10000                        |             |
|           | Merchant                                                                        |                            |                              |             |
|           | No.(C/4), Pin Shwe Nyung Street, Tamwe<br>Kalay Ward, Tamwe Township,<br>YANGON |                            |                              | e e         |
| 2         | U Than Myint @ Khaw Tin Eain                                                    | 12/LAMATA(NAING)027772     | 10000                        |             |
| -         | Merchant                                                                        |                            | 10000                        |             |
|           | No.(45-A), Pyay Road, 11-Ward, Hlaing<br>Township,YANGON                        |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            |                              |             |
|           |                                                                                 |                            | X                            |             |
|           | Dated 04 the                                                                    | 02 day of 2015             |                              | winey       |
| It is her | eby certified that the persons mentioned                                        | above                      | Daw K                        | hin Win Vi  |
| put thei  | r signatures in my presence.                                                    |                            | B.Com<br>Registered A        | (A.A) C.P.A |

### THE MYANMAR COMPANIES ACT

### PRIVATE COMPANY LIMITED BY SHARES

### **Articles Of Association**

### NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED

### $\diamond \ \diamond \ \diamond \ \diamond \ \diamond \ \diamond$

1. The regulations contained in Table 'A' in the First Schedule to the Myanmar Companies Act shall apply to the Company save in so far as such regulations which are inconsistent with the following Articles. The compulsory regulations stipulated in Section 17 (2) of the Myanmar Companies Act shall always be deemed to apply to the Company.

### PRIVATE COMPANY

- 2. The Company is to be a Private Company and accordingly following provisions shall have effect:-
  - (a) The number of members of the Company, exclusive of persons who are in the employment of the Company, shall be limited to fifty.
  - *(b)* Any invitation to the public to subscribe for any share or debenture or debenture stock of the Company is hereby prohibited.

### **CAPITAL AND SHARES**

| 3. | The | Authorised Capital | of the Company | / is Ks. <b>300,000,000,000</b> |           | /-(Kyats         |
|----|-----|--------------------|----------------|---------------------------------|-----------|------------------|
|    | Thr | ee Hundred Thous   | and Million    | only) divided into (            | 3,000,000 | ) shares of      |
|    | Ks  | 100,000.00         | /-(Kyats       | One Hundred Thousand            |           | only) each, with |
|    | -   |                    | 0              | ease, reduce or alter such capi |           |                  |

with the regulations of the Company and the legislative provisions for the time being in force in this behalf.

- 4. Subject to the provisions of the Myanmar Companies Act the shares shall be under the control of the Directors, who may allot or otherwise dispose of the same to such persons and on such terms and conditions as they may determine.
- 5. The certificate of title to share shall be issued under the Seal of the Company, and signed by the General Manager or some other persons nominated by Board of Directors. If the share certificate is defaced, lost or destroyed, it may be renewed on payment of such fee, if any, and on such terms, if any, as to evidence and indemnity as the Directors may think fit. The legal representive of a deceased member shall be recognized by the Directors.

6. The Directors may, from time to time make call upon the members in respect of any money unpaid on
their shares, and each member shall be liable to pay the amount of every call so made upon him to the persons, and at the times and places appointed by the Directors. A call may be made payable by instalments or may be revoked or postponed as the Directors may determine.

### DIRECTORS

7. Unless otherwise determined by a General Meeting the number of Directors shall not be less than

(2) and not more than (50).

The First Directors shall be:-

(1) U Maung Kyay @ Tee Kar Kway (2) U Than Myint @ Khaw Tin Eain

- 8. The Directors may from time to time appoint one of their body to the office of the Managing Director for such terms and at such remuneration as they think fit and he shall have all the powers delegated to him by the Board of Directors from time to time.
- 9. The qualification of Director shall be the holding of at least (-) shares in the Company in his or her own name and it shall be his duty to comply with the provision of Section (85) of the Myanmar Companies Act.
- 10. The Board of Directors may in their absolute and uncontrolled discretion refuse to register any proposed transfer of shares without assigning any reason.

### **PROCEEDINGS OF DIRECTORS**

- 11. The Director may meet together for the despatch of business, adjourn and otherwise regulate their meeting as they think fit and determine the quorum necessary for the transaction of business. Unless otherwise determined, two shall form a quorum. If any question arising at any meeting the Managing Director's decision shall be final. When any matter is put to a vote and if there shall be an equality of votes, the Chairman shall have a second or casting vote.
- 12. Any Director may at any time summon a meeting of Directors.
- 13. A resolution in writing signed by all the Directors shall be as effective for all purposes as a resolution passed out at meeting of the Directors, duly called, held and constituted.

- 14. Without prejudice to the general power conferred by Regulation 71 of the Table "A" of the Myanmar Companies Act, it is hereby expressly declared that the Directors shall have the following powers, that is to say power;-
  - (1) To purchase or otherwise acquire for the Company any property, rights or privileges which the Company is authorized to acquire at such price, and generally on such terms and conditions as they think fit: also to sell, lease, abandon or otherwise deal with any property, rights or privileges to which the Company may be entitled, on such terms and conditions as they may think fit.
  - (2) To raise, borrow or secure the payment of such sum or sums in such manner and upon such terms and conditions in all respects as they think fit and in particular by the issue of debentures or debenture stocks of the Company charged upon all or any part of the property of the Company (both present and future) including its uncalled capital for the time being,
  - (3) At their discretion, to pay for any rights acquired or services rendered to the Company, either wholly or partially in cash or in shares, bonds, debentures or other securities of the Company and any such shares may be issued either as fully paid up or with such amount credited as paid up there on as may be agreed upon; and any such bonds, debentures or other securities may be either specifically charged up on all or any part of the property of the Company and its uncalled capital or not so charged.
  - (4) To secure the fulfillment of any contract or engagement entered into by the Company by mortgage or charge upon all or any of the property of the Company and its uncalled capital for the time being or by granting calls on shares or in such manner as they may think fit.
  - (5) To appoint at their discretion, remove or suspend such Managers, Secretaries, Officers, Clerks, Agents and Servants for permanent, temporary or special services as they may from time to time think fit and, to determine their duties and powers and fix their salaries or emoluments and to require security in such instances in such amount as they think fit and to depute any officers of the Company to do all or any of these things on their behalf.
  - (6) To appoint a Director as Managing Director, General Manager, Secretary or Departmental Manager in conjunction with his Directorship of the Company.

- (7) To accept from any member on such terms and conditions as shall be agreed on the surrender of his shares or any part thereof.
- (8) To appoint any person or persons to accept and hold in trust for the Company any property belonging to the Company or in which it is interested or for any other purposes and to execute and do all such deeds and things as may be requisite in relation to any such trust.
- (9) To institute, conduct, defend of abandon any legal proceedings by or against the Company or its officers or otherwise concerning the affairs of the Company and also to compound and allow time for payment or satisfaction of any debts due to or of any claims and demands by or against the Company.
- (10) To refer claims and demands by or against the Company to arbitration and to observe and perform the awards.
- (11) To make and give receipts, releases and other discharges for money payable to the Company and for the claims and demands of the Company.
- (12) To act on behalf of the Company in all matters relating to bankruptcy and insolvency.
- (13) To determine who shall be entitled to sign bills of exchange, cheques, promissory notes, receipts, endorsements, releases contracts and documents for or on behalf of the Company.
- (14) To invest, place on deposit and otherwise deal with any of the moneys of the Company not immediately required for the purpose thereof, upon securities or without securities and in such manners as the Directors may think fit, and from time to time vary or realize such investments.
- (15) To execute in the name and on behalf of the Company in favour any Director or other person who may incur or be about to incur any personal liability for the benefit of the Company, such mortgages of the Company's property (present and future) as they think fit and any such mortgage may contain a power of sale and such other powers, covenants and provisions as shall be agreed on.
- (16) To give any officer or other person employed by the Company a commission on the profits of any particular business or transaction or a share in the general profit of the Company and such commission or share of profit shall be treated as part of the working expenses of the Company.

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- (17) From time to time, to make, vary and repeal bye- laws for the regulation of the business of the Company, the officers and servants or the members of the Company or any section thereof.
- (18) To enter into all such negotiations and contracts and rescind and vary all such contracts and execute and do all such acts, deeds and things in the name and on behalf of the Company as they may consider expedient for or in relation to any of the matter aforesaid or otherwise for the purposes of the Company.
- (19) To borrow money for the benefit of the Company's business from any person, firm or company or bank or financial organization of local and abroad in the manner that the Directors shall think fit.
- 15. A general meeting shall be held within eighteen months from the date of its incorporation and thereafter at least once in every calendar year at such time (not being more than fifteen months after the holding of the last preceding general meeting ) and places as may be fixed by the Board of Directors. No business shall be transacted at any general meeting unless a quorum of members is presented at the time when the meeting proceeds to business, save as herein otherwise provided Member holding not less than 50 percent of the issued shares capital (not less than two members) personally present, shall form a quorum for all purposes. And if and when in the case of there are only two number of members in the Company, those two members shall form a quorum.

#### DIVIDENDS

16. The Company in general meeting may declare a dividend to be paid to the members, but no dividend shall exceed the amount recommended by the Directors .No dividends shall be paid otherwise than out of the profits of the year or any other undistributed profits.

#### OFFICE STAFF

17. The Company shall maintain an office establishment and appoint a qualified person as General Manager and other qualified persons as office staffs. The remunerations and allowances such as salaries, travelling allowances and other expenditures incidental to the business shall be determined by the Board of Directors, and approved by the general meeting. The General Manager shall be responsible for the efficient operation of the office in every respect and shall be held accountable at all times to the Managing Director.

#### ACCOUNTS

- 18. The Directors shall cause to be kept proper books of account with respect to:-
  - (1) all sums of money received and expended by the Company and the matters in respect of which the receipts and expenditures take place:
  - (2) all sales and purchases of goods by the Company;
  - (3) all assets and liabilities of the Company.
  - 19. The books of account shall be kept at the registered office of the Company or at such other place as the Directors shall think fit and shall be opened to inspection by the Directors during office hours.

#### AUDIT

20. Auditors shall be appointed and their duties regulated in accordance with the provisions of the Myanmar Companies Act or any statutory modifications thereof for the time being in force.

#### NOTICE

21. A notice may be given by the Company to any member either personally or sending it by post in a prepaid letter addressed to his registered address.

#### THE SEAL

22. The Directors shall provide for the safe custody of the Seal, and the Seal shall never be used except by the authority of the Directors previously given, and in the presence of one Director at least, who shall sign every instrument to which the Seal is affixed.

#### INDEMNITY

23. Subject to the provisions of Section 86 (C) of the Myanmar Companies Act and the existing laws, every Director, Auditor, Secretary or other officers of the Company shall be entitled to be indemnified by the Company against all costs, charges. losses, expenses and liabilities incurred by him in the execution and discharge of the duties or in relation thereto.

#### WINDING - UP

24. Subject to the provisions contained in the Myanmar Companies Act and the statutory modification thereupon, the Company may be wound up voluntarily by the resolution of General Meeting.

We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Articles of Association, and we respectively agree to take the number of shares in the Capital of the Company set opposite our respective names.

| Sr. No. | Name, Address and<br>Occupation of Subscribers                                                                             | Nationality &<br>N.R.C No. | Number of<br>Shares<br>taken | Signatures               |
|---------|----------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------|--------------------------|
| 1       | U Maung Kyay @ Tee Kar Kway<br>Merchant<br>No.(C/4), Pin Shwe Nyung Street, Tamwe<br>Kalay Ward, Tamwe Township,<br>YANGON | 12/LATHANA(NAING)018174    | 10000                        |                          |
| 2       | U Than Myint @ Khaw Tin Eain<br>Merchant                                                                                   | 12/LAMATA(NAING)027772     | 10000                        | A                        |
|         | No.(45-A), Pyay Road, 11-Ward, Hlaing<br>Township,YANGON                                                                   |                            |                              |                          |
|         |                                                                                                                            |                            |                              |                          |
|         |                                                                                                                            |                            |                              |                          |
|         |                                                                                                                            |                            |                              |                          |
|         |                                                                                                                            |                            |                              |                          |
|         | Dated 04 the                                                                                                               | 02 day of 2015             | X                            | hout                     |
|         | eby certified that the persons mentioned a signatures in my presence.                                                      |                            | B.Com (.<br>Registered Acc   | hin Win Yi<br>A.A) C.P.A |

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Financial Consultant

### FINANCIAL STATEMENTS

 $\mathbf{OF}$ 

NATIONAL INFRASTRUCTURE HOLDINGS

COMPANY LIMITED

FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

**REPORT OF THE AUDITOR** 

STATEMENT OF THE DIRECTORS

STATEMENT OF FINANCIAL POSITION

STATEMENT OF COMPREHENSIVE INCOME

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FOR THE FINANCIAL YEAR 2015 - 2016.

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# WIN GROUP CERTIFIED PUBLIC ACCOUNTANTS

No. 55, Ground Floor, 12<sup>th</sup> St. Lanmadaw T/S, Yangon Phone : 09-732-15959, 09-506-5857 Email : wingroup.cpa@gmail.com

### AUDITOR'S REPORT

# The Board of Directors NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED

We have audited the accompanying Statement of Financial Position of National Infrastructure Holdings Company Limited as of March 31, 2016 and the related Statement of Comprehensive Income for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing practices. Those practices require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the over all financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with Section 145(1)(2) of The Myanmar Companies Act we report that we have obtained all the information and explanations we have required.

In our opinion, according to the best of our knowledge and belief and the explanation given to us and as shown by the books of the Company, which have been maintained in accordance with Section 130 of the Act, the Statement of Financial Position and the relative Statement of Comprehensive Income are in conformity with the law and properly drawn up so as to exhibit a true and fair view of the state of affairs of the Company as of March 31, 2016.

Dated: 20 JAN 2017

(WIN-NAING) B.Com (A-A). C.P.A Certified Public Accountant



### Statement by Director's Pursuant to Section 133 (1)(2)

We, being Managing Director and Directors of NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED, do hereby state, in the opinion:

(a) the Financial Statements, together with the necessary explanations, thereto, set out on the attachments, are drawn up so as to give a true and fair view of the statement of affairs of the Company as at March 31, 2016 and of the result and changes in financial position of the Company for the year ended March 31, 2016.

(b) at the date of this statement, there is reasonable grounds and to believe that the Company will be able to pay its debts as and when they fall due.

On behalf of the board of Directors

MAUNG KYAY MANAGING DIRECTOR

MANAGING DIRECTUR NATIONAL INFRASTRUCTURE HOLDINGS CO. ITD

Dated: 20 JAN 2017

THAN MYINT DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD.



### STATEMENT OF FINANCIAL POSITION

AS AT MARCH 31, 2016.

|                                                                               | Note    | 2015-2016          | 2014-2015                                     |
|-------------------------------------------------------------------------------|---------|--------------------|-----------------------------------------------|
|                                                                               |         | ммк                | ммк                                           |
| PROPERTY & ASSETS                                                             |         |                    |                                               |
| NON-CURRENT ASSETS                                                            |         |                    |                                               |
| Property and Equipment                                                        | 2       | 7,107,425.00       | 7,720,775.00                                  |
| Receivable                                                                    | 3       | 19,114,780,821.92  | -                                             |
| CURRENT ASSETS                                                                |         |                    |                                               |
| Cash at Bank                                                                  | 4       | 110,050.00         | 100,050.00                                    |
| Cash in Hand                                                                  | 5       | 12,828,309,200.00  | 1,990,397,900.00                              |
| TOTAL PROPERTY & ASSETS                                                       |         | 31,950,307,496.92  | 1,998,218,725.00                              |
| EQUITY AND LIABILITIES                                                        |         |                    |                                               |
| SHAREHOLDER'S EQUITY                                                          |         |                    |                                               |
| Authorized Share Capital<br>3,000,000 Shares @ K 100,000 each/-               | 6       | 300,000,000,000.00 | 300,000,000,000.00                            |
| Issued & Paid Up Share Capital                                                |         |                    |                                               |
| 128,460 Shares @ K 100,000 each/-                                             | 7       | 12,846,000,000.00  | 2,000,000,000.00                              |
| Retained Earning                                                              |         |                    |                                               |
| Balance at Start of Year                                                      |         | (1,931,275.00)     | -                                             |
| Net Loss for the Year                                                         |         | (8,692,050.00)     | (1,931,275.00)                                |
| NON-CURRENT LIABILITIES                                                       |         |                    |                                               |
| Bank Loan and Overdraft-MEB                                                   | 8       | 19,000,000,000.00  |                                               |
| CURRENT LIABILITIES                                                           |         |                    |                                               |
| Provision Expenses                                                            | 9       | 114,930,821.92     | 150,000.00                                    |
| TOTAL EQUITY ALIABILITIES                                                     |         | 31,950,307,496.92  | 1,998,218,725.00                              |
| $\sum_{i=1}^{n}$                                                              |         | (fr                |                                               |
| MAUNG KYAY<br>MANAGING DIRECTOR<br>NATIONAL INFRASTRUCTURE HOLDINGS CO., LFD. | YGN YGN | DIRE               | (1)<br>MYINT<br>CTOR<br>TURE HOLDINGS CO.LTD. |

# STATEMENT OF COMPREHENSIVE INCOME

## FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

|                                | Note | 2015-2016      | 2014-2015      |
|--------------------------------|------|----------------|----------------|
| _                              |      | ммк            | ММК            |
| income                         |      |                |                |
| Income                         |      |                |                |
|                                |      | -              |                |
| (Less) Administration Expenses | 10   | (8,692,050.00) | (1,931,275.00) |
| Net Loss for the Year          |      | (8,692,050.00) | (1,931,275.00) |



### STATEMENT OF CASH FLOW

### FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

|                                                      | 2015-2016           | 2014-2015        |
|------------------------------------------------------|---------------------|------------------|
| Cash flows from operating activities                 | ммк                 | ммк              |
| Profit for the year-before tax                       | (8,692,050.00)      | (1,931,275.00)   |
| Adjustments for                                      |                     | -                |
| Depreciation of property, plant and equipment        | 613,350.00          | 102,225.00       |
| Amortization of intangibles                          | -                   | -                |
| Gain on sales of equipment                           | -                   |                  |
| Operating profit before working capital changes      | (8,078,700.00)      | (1,829,050.00)   |
| Decrease (Increase) in trade and other receivables   | -                   | -                |
| Decrease (Increase) in long term loan                | (19,114,780,821.92) | -                |
| Decrease (Increase) in inventories                   |                     | -                |
| Increase (Decrease) in trade payables                |                     | -                |
| Increase payables                                    | 114,780,821.92      | 150,000.00       |
| Cash generated from operating                        | (19,008,078,700.00) | (1,679,050.00)   |
| Interest paid                                        | -                   | -                |
| Income tax paid                                      | -                   | -                |
| Proceeds from extraordinary items                    |                     | -                |
| Net Cash from operating activities                   | (19,008,078,700.00) | (1,679,050.00)   |
| Cash flows from investing activities                 |                     |                  |
| Proceeds from sales of equipment                     | -                   |                  |
| Purchases of property, plant & equipment             | -                   | (7,823,000.00)   |
| Dividend received                                    | -                   | -                |
| Net Cash provided (used) in investing activities     | -                   | (7,823,000.00)   |
| Cash flows from financing activates                  |                     |                  |
| Proceeds from issuance of share capital              | 10,846,000,000.00   | 2,000,000,000.00 |
| Proceeds/payment from long-term borrowings           | 19,000,000,000.00   |                  |
| Payment of finance lease liabilities                 | -                   |                  |
| Net cash provided (used) in financing activities     | 29,846,000,000.00   | 2,000,000,000.00 |
| Net increase (decrease) in cash and cash equivalents | 10,837,921,300.00   | 1,990,497,950.00 |
| Cash and cash equivalents at beginning of year       | 1,990,497,950.00    | -                |
| Cash and cash equivalents at end of year             | 12,828,419,250.00   | 1,990,497,950.00 |
| GRG(A                                                | (h)                 |                  |

MAUNG KYAY MANAGING DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS CO.,LTD.



THAN MYINT (3) DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS (3)

## STATEMENT OF CHANGES IN SHAREHOLDER'S EQUITY

# FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

|                                         |        | 2015-2016         | 2014-2015        |
|-----------------------------------------|--------|-------------------|------------------|
|                                         |        | ммк               | ммк              |
| Issued and Paid Up Share Capital        |        |                   |                  |
| 20,000 Shares @ MMK 100,000 each/-      |        | 2,000,000,000.00  | 2,000,000,000.00 |
| Add-                                    |        | 10,846,000,000.00 |                  |
| during the year 108,460 @ MMK 100,000 e | each/- |                   |                  |
| TOTAL                                   | [1]    | 12,846,000,000.00 | 2,000,000,000.00 |
| Retained Earning                        |        |                   |                  |
| Balance at Beginning of Year            |        | (1,931,275.00)    | -                |
| Net Profit /(Loss) for the Year         |        | (8,692,050.00)    | (1,931,275.00)   |
| TOTAL                                   | [2]    | (10,623,325.00)   | (1,931,275.00)   |
| Balance at End of Year                  | [1+2]  | 12,835,376,675.00 | 1,998,068,725.00 |



### NOTES TO THE FINANCIAL STATEMENTS

#### FOR THE FINANCIAL YEAR 2015-2016.

#### NOTE (I) COMPANY BACKGROUND

#### A. Incorporation

Company was incorporated under the Union of Myanmar Companies Act and granted the Incorporation Certificate No.5517 / 2014-2015 dated February 10, 2015 of Directorate of investment and Company Administration, Ministry of National Planning and Economic Development.

B. Line of Business

The principal activity of the company is to carry out all type of business.

NOTE (2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### A. Basic of Accounting

The financial statements have been prepared in accordance with Myanmar Financial Reporting Standard (MFRSs) and are based on the historical cost convention.

#### B. Accounting Period

The accounting year is from April 1, 2015 to March 31, 2016.

### C. Property, Plant & Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is provided to write off the cost of all items of property and equipment over their estimated useful lives, using the straight-line method, at the following annual rate:

| Furniture & Fixture                       | 5%  |
|-------------------------------------------|-----|
| Office Equipment                          | 10% |
| Computer & Accessories                    | 10% |
| Tangible assets are stated at Schedule-1. |     |

D. Cash and Cash Equivalents

Cash and cash equivalents comprise cash in hand and deposits with various local banks. " NOTE (3) RECEIVABLE

The amount receivable from Oriental Highway Company Limited.

### NOTE (4) CASH AT BANK

Company opened the bank A/C No. 061-103-06100926501 in Kanbawza Bank and Myanmar Economic Bank A/C No. the amount balances of cash at bank were MMK 100,050/- and MMK 10,000/- as of March 31, 2016. Bank balances have been reconciled with the respectively Bank Statements.



(5)

#### NOTE (5) CASH IN HAND

The amount balance of cash in hand at March 31, 2016 was confirmed by the management.

#### NOTE (6) AUTHORIZED SHARE CAPITAL

According to the Memorandum of Association and Article of Association, details are as follows:-

3,000,000 Shares @ MMK 100,000 / -each

#### NOTE (7) ISSUED AND PAID UP SHARE CAPITAL

According to the Form VI dated 6<sup>th</sup> March, 2015 and 30<sup>th</sup> March, 2016 issued and paid up are as follows:-

128,460 Shares @ MMK 100,000/· each 12,846,000,000.00

NOTE (8) MEB LOAN

The loan amount borrowed from Myanmar Economic Bank. The Company has to pay 13 % interest per year.

#### NOTE (9) PROVISION EXPENSES

The amount comprised as follows:-

|                                             | ммк            |
|---------------------------------------------|----------------|
| The amount provided for legal and audit fee | 150,000.00     |
| Interest on MEB Loan                        | 114,780,821.92 |
| TOTAL                                       | 114,930,821.92 |
|                                             |                |



(6)

ммк

300,000,000,000.00

### NOTE (10) ADMINISTRATION EXPENSES

The amount comprised as follows:-

|                                  | 2015-2016    | 2014-2015    |  |
|----------------------------------|--------------|--------------|--|
|                                  | ммк          | ммк          |  |
| Salaries & Wages                 | 7,200,000.00 |              |  |
| Company registration fees        |              | 1,000,000.00 |  |
| Company formation expenses       |              | 150,000.00   |  |
| UMFCCI registration fee          | -            | 208,000.00   |  |
| Stamp duty                       | 2,700.00     | 200,000.00   |  |
| Cheque book charges              |              | 50.00        |  |
| Telecommunication                | 120,000.00   | 20,000.00    |  |
| Electricity                      | 300,000.00   | 50,000.00    |  |
| Miscellaneous                    | 306,000.00   | 51,000.00    |  |
| Depreciations                    | 613,350.00   | 102,225.00   |  |
| Provision for Legal & Audit fees | 150,000.00   | 150,000.00   |  |
| TOTAL                            | 8,692,050.00 | 1,931,275.00 |  |



(7)

# PROPERTY & EQUIPMENT AND DEPRECIATION SCHEDULE

FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

Schedule - 1

|   |                        | AT Cost    |      | Depreciation |              |              | Net Book   |
|---|------------------------|------------|------|--------------|--------------|--------------|------------|
|   | Particulars            |            | Rate | Opening      | for the Year | Total        | Value      |
|   |                        | 31.03.2016 | %    | 01.04.2015   |              | 31.03.2016   | 31.03.2016 |
| _ |                        | ммқ        |      | ммк          | ммк          | ммк          | ммк        |
| _ | Furniture & Fixture    | 3,379,000  | 5    | 28,158.00    | 168,950      | 197,108      | 3,181,892  |
|   | Office Equipment       | 1,600,000  | 10   | 26,667.00    | 160,000      | -<br>186,667 | 1,413,333  |
|   | Computer & Accessories | 2,844,000  | 10   | 47,400.00    | 284,400      | 331,800      | 2,512,200  |
| _ | TOTAL                  | 7,823,000  |      | 102,225.00   | 613,350      | 715,575      | 7,107,425  |



# SUMMARY CASH STATEMENT

## FOR THE FINANCIAL YEAR ENDED MARCH 31, 2016.

Schedule - 2

| PARTICULARS                   | ммк          | ммк               |
|-------------------------------|--------------|-------------------|
| Receipts                      |              |                   |
| Opening balance               |              | 1,990,397,900.00  |
| Capital Contribute            |              | 10,846,000,000.00 |
|                               |              | 12,836,397,900.00 |
| ayments                       |              |                   |
| Salaries & Wages              | 7,200,000.00 |                   |
| Stamp Duty                    | 2,700.00     |                   |
| Opening bank current A/C MEB  | 10,000.00    |                   |
| Telecommunication             | 120,000.00   |                   |
| Electricity                   | 300,000.00   |                   |
| Miscellaneous                 | 306,000.00   |                   |
| Legal & Audit Fee (2014-2015) | 150,000.00   | (8,088,700.0      |
| Balance at March 31, 2016.    |              | 12,828,309,200.00 |



### FINANCIAL STATEMENTS

 $\mathbf{OF}$ 

NATIONAL INFRASTRUCTURE HOLDINGS

COMPANY LIMITED

FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015.

**REPORT OF THE AUDITOR** 

STATEMENT OF THE DIRECTORS

STATEMENT OF FINANCIAL POSITION

STATEMENT OF COMPREHENSIVE INCOME

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FOR THE FINANCIAL YEAR 2014 - 2015.

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# WIN GROUP CERTIFIED PUBLIC ACCOUNTANTS

No. 55, Ground Floor, 12<sup>th</sup> St. Lanmadaw T/S, Yangon Phone : 09-732-15959, 09-506-5857 Email : wingroup.cpa@gmail.com

### AUDITOR'S REPORT

## The Board of Directors NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED

We have audited the accompanying Statement of Financial Position of National Infrastructure Holdings Company Limited as of March 31, 2015 and the related Statement of Comprehensive Income for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing practices. Those practices require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the over all financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with Section 145 (1)(2) of The Myanmar Companies Act we report that we have obtained all the information and explanations we have required.

In our opinion, according to the best of our knowledge and belief and the explanation given to us and as shown by the books of the Company, which have been maintained in accordance with Section 130 of the Act, the Statement of Financial Position and the relative Statement of Comprehensive Income are in conformity with the law and properly drawn up so as to exhibit a true and fair view of the state of affairs of the Company as of March 31, 2015.

Dated: 20 JAN 2017

(WIN NAING) B.Com (A-A), C.P.A Certified Public Accountant



#### Statement by Director's Pursuant to Section 133 (1)(2)

We, being Managing Director and Directors of NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED, do hereby state, in the opinion:

(a) the Financial Statements, together with the necessary explanations, thereto, set out on the attachments, are drawn up so as to give a true and fair view of the statement of affairs of the Company as at March 31, 2015 and of the result and changes in financial position of the Company for the year ended March 31, 2015.

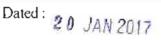
(b) at the date of this statement, there is reasonable grounds and to believe that the Company will be able to pay its debts as and when they fall due.

On behalf of the board of Directors

(p)

THAN MYINT DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS CO., LTD.

MAUNG KYAY MANAGING DIRECTOR NATIONAL INFRASTRUCTURE HOLDINGS COLLED





### STATEMENT OF FINANCIAL POSITION

AS AT MARCH 31, 2015.

|                                     | Note | ммк                |
|-------------------------------------|------|--------------------|
| PROPERTY & ASSETS                   |      |                    |
| NON-CURRENT ASSETS                  |      |                    |
| Property and Equipment              | 2    | 7,720,775.00       |
| CURRENT ASSETS                      |      |                    |
| Cash at Bank                        | 3    | 100,050.00         |
| Cash in Hand                        | 4    | 1,990,397,900.00   |
| TOTAL PROPERTY & ASSETS             |      | 1,998,218,725.00   |
| EQUITY AND LIABILITIES              |      |                    |
| SHAREHOLDER'S EQUITY                |      |                    |
| Authorized Share Capital            |      |                    |
| 3,000,000 Shares @ K 100,000 each/+ | 5    | 300,000,000,000.00 |
| ssued & Paid Up Share Capital       |      |                    |
| 20,000 Shares @ K 100,000 each/-    | 6    | 2,000,000,000.00   |
| Retained Earning                    |      |                    |
| Balance at Start of Year            |      | -                  |
| Net Loss for the Year               |      | (1,931,275.00)     |
| CURRENT LIABILITIES                 |      | j.                 |
| Provision Expenses                  | 7    | 150,000.00         |
| TOTAL EQUITY & LIABILITIES          |      | 1,998,218,725.00   |



MADING STAY MANALINFRAMING CO. 370



(1)THAN MYINT

DISCIPLE AND ADDRESS OF A DESCRIPTION OF

## NATIONAL INFRASTRUCTURE HOLDINGS COMPANY LIMITED STATEMENT OF COMPREHENSIVE INCOME FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015. MMK MMK. PARTICULARS. Income Income (Less) Administration Expenses Company registration fees 1,000,000.00 Company formation expenses 150,000.00 UMFCCI registration fee 208,000.00 Stamp duty 200,000.00 Cheque book charges 50.00 Telecommunication 20,000.00 Electricity 50,000.00 Miscellaneous 51,000.00 **Depreciations** 102,225.00 Provision for Legal & Audit fees 150,000.00 (1,931,275.00) Net Loss for the Year (1,931,275.00)



### STATEMENT OF CASH FLOW

### FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015.

|                                                                                 | ммк                                                              |
|---------------------------------------------------------------------------------|------------------------------------------------------------------|
| Cash flows from operating activities                                            |                                                                  |
| Profit for the year before tax                                                  | (1,931,275.00)                                                   |
| Adjustments for                                                                 |                                                                  |
| Depreciation of property, plant and equipment                                   | 102,225.00                                                       |
| Amortization of intangibles                                                     | -                                                                |
| Gain on sales of equipment                                                      | -                                                                |
| Operating profit before working capital changes                                 | (1,829,050.00)                                                   |
| Decrease (Increase) in trade and other receivables                              | -                                                                |
| Decrease (increase) in inventories                                              | -                                                                |
| Increase (Decrease) in trade payables                                           | 150,000.00                                                       |
| Increase payables                                                               | -                                                                |
| Cash generated from operating                                                   | (1,679,050.00)                                                   |
| Interest paid                                                                   |                                                                  |
| Income tax paid                                                                 | -                                                                |
| Proceeds from extraordinary items                                               | -                                                                |
| Net Cash from operating activities                                              | (1,679,050.00)                                                   |
| Cash flows from investing activities                                            |                                                                  |
| Proceeds from sales of equipment                                                | -                                                                |
| Purchases of property, plant & equipment                                        | (7,823,000.00)                                                   |
| Dividend received                                                               | -                                                                |
| Net Cash provided (used) in investing activities                                | (7,823,000.00                                                    |
| Cash flows from financing activates                                             |                                                                  |
| Proceeds from issuance of share capital                                         | 2,000,000,000.00                                                 |
| Proceeds/payment from long-term borrowings                                      | -                                                                |
| Payment of finance lease liabilities                                            | -                                                                |
| Net cash provided (used) in financing activities                                | 2,000,000,000.00                                                 |
| Net increase (decrease) in cash and cash equivalents                            | 1,990,497,950.00                                                 |
| Cash and cash equivalents at beginning of year                                  |                                                                  |
| Cash and cash equivalents at end of year                                        | 1,990,497,950.00                                                 |
| MAUNG KYAY<br>MANAGING DIBECTOR<br>NATIONAL INFEATTER CTU 10 ALL DISIGS COLLTD. | THAN MYINT<br>DIRECTOR<br>ATIONAL INFRASTRUCTURE HOLDINGS COLUTD |

### STATEMENT OF CHANGES IN SHAREHOLDER'S EQUITY

### FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015.

| _                                |       | ММК              |
|----------------------------------|-------|------------------|
| Issued and Paid Up Share Capital |       |                  |
| 20,000 Shares @ K 100,000 each/- |       | 2,000,000,000.00 |
| TOTAL                            | [1]   | 2,000,000,000 00 |
| Retained Earning                 |       |                  |
| Balance at Beginning of Year     |       |                  |
| Net Profit /(Loss) for the Year  |       | (1,931,275.00    |
| TOTAL                            | [2]   | (1,931,275.00    |
| Balance at End of Year           | [1+2] | 1,998,068,725.00 |



### NOTES TO THE FINANCIAL STATEMENTS

### FOR THE FINANCIAL YEAR 2014-2015.

### NOTE (1) COMPANY BACKGROUND

### A. Incorporation

Company was incorporated under the Union of Myanmar Companies Act and granted the Incorporation Certificate No.5517 / 2014-2015 dated February 10, 2015 of Directorate of investment and Company Administration, Ministry of National Planning and Economic Development.

### B. Line of Business

The principal activity of the company is to carry out all type of business.

### NOTE (2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### A. Basic of Accounting

The financial statements have been prepared in accordance with Myanmar Financial Reportin Standard (MFRSs) and are based on the historical cost convention.

### **B. Accounting Period**

The accounting year is from April 1, 2014 to March 31, 2015.

### C. Property & Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is provided to write off the cost of all items of property and equipment over their estimated useful lives, using the straight-line method, at the following annual rate:

| Furniture & Fixture    | 5%  |
|------------------------|-----|
| Office Equipment       | 10% |
| Computer & Accessories | 10% |

Tangible assets are stated at Schedule-1

### D. Cash and Cash Equivalents

Cash and cash equivalents comprise cash in hand and deposits with various local banks.



### NOTE (3) CASH AT BANK

Company opened the bank A/C No. 061-103-06100926501 in Kanbawza Bank and the amount balance of cash at bank was MMK 100,050/- as of March 31, 2015. Bank balance has been reconciled with the Bank Statement.

### NOTE (4) CASH IN HAND

The amount balance of cash in hand at March 31, 2015 was confirmed by the management.

### NOTE (5) AUTHORIZED SHARE CAPITAL

According to the Memorandum of Association and Article of Association, details are as follows:-

3,000,000 Shares @ MMK 100,000 / each

### NOTE (6) ISSUED AND PAID UP SHARE CAPITAL

According to the Form VI dated 6<sup>th</sup> March , 2015 issued and paid up capital as follows:-

20,000 Shares @ MMK 100,000 /-each

### NOTE (7) PROVISION EXPENSES

The amount provided for legal and audit fee.



## ммк

2,000,000,000.00

ммк

300,000,000,000.00

### PROPERTY & EQUIPMENT AND DEPRECIATION SCHEDULE

### FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015.

Schedule - 1

|                        | AT Cost           |      | Dep        | reciation    |            | Net Book   |
|------------------------|-------------------|------|------------|--------------|------------|------------|
| Particulars            |                   | Rate | Opening    | for the Year | Total      | Value      |
|                        | 31.03.2015        | %    | 01.04.2014 | for the real | 31.03.2015 | 31.03.2015 |
|                        | ммк               |      | ммк        | ммк          | ммк        | ммк        |
| Furmture & Fixture     | 3,379,000         | 5    | -          | 28,158       | 28,158     | 3,350,842  |
| Office Equipment       | 1,600,000         | 10   | -          | 26,667       | 26,667     | 1,573,33   |
| Computer & Accessories | 2,844,000         | 10   | -          | 47,400       | 47,400     | 2,796,60   |
| TOTAL                  | <b>7,8</b> 23,000 |      | -          | 102,225      | 102,225    | 7,720,77   |



### SUMMARY CASH STATEMENT

Schedule - 2

### FOR THE FINANCIAL YEAR ENDED MARCH 31, 2015.

| PARTICULARS                  | MMK          | ММК              |
|------------------------------|--------------|------------------|
| Receipts                     |              |                  |
| Capital Contribute           |              | 2,000,000,000.00 |
| Payments                     |              |                  |
| Company Registration Fees    | 1,000,000.00 |                  |
| Company Formation Expenses   | 150,000.00   |                  |
| UMFCCI Registration Fee      | 208,000.00   |                  |
| Stamp Duty                   | 200,000.00   |                  |
| Opening bank current A/C KBZ | 100,100.00   |                  |
| Telecommunication            | 20,000.00    |                  |
| Electricity                  | 50,000.00    |                  |
| Miscellaneous                | 51,000.00    |                  |
| Purchase of assets           | 7,823,000.00 | (9,602,100 00    |
| Balance at March 31, 2015.   |              | 1,990,397,900.00 |



ထင်္ဂတစ်းစိုး၊ နိုင်ရှိသို့ထောင်စုထမ္မတဖြန်မာနိုင်ငံတော်အစိုးရ 000121 ခိုင်ကိန်းနှင့် စီးပွားရေဖွံ့ဖြံ့တိုးကက်စွဝန်ကြီးဌာန နိုတ်ဗိမမ္မာဗုန်ရာဗုန်မာဗုန်မာမုန မြန်မာနိုစ်ငံ တုမ္ပဏီမွား အက်ဥပအေရ မြန်မာဓာတ္ခဗေဒနှင့်စက်ပစ္စည်း ကုမ္ပဏီ လိမ်ဟက် တုမ္ပဏီအဖြစ် ၂ ၀၀၀ နှစ်၊ အောက်တိုဘည်၊ ၂ .... ရက်နေ့တွင် မှတ်ပုံတင်ထားခြင်းစား ၂၀၁၃ ခုန်၊ စက်တင်ဘာလ၊ ...ပိ. တေ်နေ့မှစ၍ ထတ်တမ်းတိုး ခွင့်မြုံပိုက်သည်း ညွှန်ကြားရေးမျှူးချုပ်(ကိုယ်စား) (ခုန်းရီရီသန်း ၊ ညွှန်ကြားရေးမျာ) elegater and a state a THE GOVERNMENT OF THE REPUBLIC OF THE UNION OF MYANMAR. MINISTRY OF NATIONAL PLANNING AND ECONOMIC DEVELOPMENT CERTIFICATE OF INCORPORATION I hereby certify that the tenure of MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED incorporated under the is renewed with effected from \_\_\_\_\_\_S\* SEPTEMBER, 2013. For Director General (Nong Yi Y) Than , Director) Directorate of Investment and Company Administration

# ကုမ္ပဏီနှင့်သက်ဆိုင်သည့်အချက်အလက်များ

 (က) အုပ်ချုပ်မှုဒါရိုက်တာအမည်၊ ဦးအောင်လှိုင်ဦး (၁၂/လမဟ(နိုင်)၀၂၅၈၉၇).
 (ခ) ကုမ္ပဏီ ရုံးခန်းလိပ်စာ၊ အမှုတ်(၁၁၂၀/၁၁၂၁)၊ သုမင်္ဂလာလမ်း (၁၆/၄)ရပ်ကွက်၊ သင်္ဃန်းကျွန်းဖြို့နယ်၊ ရန်ကုန်မြို့။
 (ဂ) ဆက်သွယ်ရန် ဖုန်းနံပါတ်၊ ၀၁–၅၆၂၀၂၀
 (လ) ဒါရိုက်တာများ အမည်စာရင်း ၁။ ခေါ် ခင်နွယ်မာထွန်း ၁၃/ကတန(နိုင်)၀၀၂၆၉၈ ၂။ ဦးမင်းဟန် ၁၂/ပစတ(နိုင်)၀၂၅၉၈၂

မှတ်ချက် ။

- (၃) ဤကုမ္ပဏီမှတ်ပုံတစ်လက်မှတ်သည်မှတ်ပုံတစ်ရက်စွဲ ( ၁-၈-၂၀၁၃ )မှ ( ၃၁-၇-၂၀၁၈ )ရက်နေ့အထိ( ၂)နှစ်သက်တမ်းအတွတ်သာ ဖြစ်သည်။ သက်တမ်း ကျော်ဆုံးမီ (၃)လအလိုတွင် သက်တမ်းတိုးရန် ရင်းနှီး မြှုစ်နှံမှုနှင့် ကုမ္ပဏီများညွှန့်ကြားမှု ဦးစီးဌာနသို့ လျှောက်ထား ရမည်း
- (၂) ကုမ္ပဏီ အနေဖြင့် သင်းဖွဲ့မှတ်တမ်းတွင်အဆိုပြု တင်ပြထားသော လုပ်ငန်းရည်ရွယ်ချက်များကိုသာ လုဝ်ကိုင်ရမည်း
- (၃) သင်းဖွဲ့မှတ်တမ်းပါ ရည်ရွယ်ရက်ရားသည် သက်ဆိုင်ရာ ပြည်ထောင်စု ဝန်ကြီးဌာန၏ ထည့်ဆဲဥပဒေ၊ နည်းဥပဒေ၊ လုပ်ထုံးလုပ်နည်း များနှင့်အညိ ခွင့်ပြုချတ် ရရှိမှသာ ဆောင်ရွက်ခွင့် ရှိမည် ဖြစ်ပါသည်း
- -(၄) လုပ်ငန်းရည်ရွယ်ချက် ပြောင်းလဲ လုပ်ကိုင်လိုပါက ပြောင်းလဲ လုပ်ကိုင် လိုသည့် လုပ်ငန်း ရည်ရွယ်ချက်များအား သင်းဖွဲ့မှတ်တမ်းတွင် ပြင်ဆင် မှတ်ပုံတင်ရန်အတွက် ခါရိုက်တာအဖွဲ့ (BOD)၏ အထူ၊ အစည်းအငေး ဆုံးဖြတ်ခွက် မှတ်တမ်းနှင့်အတူ ရင်းနှီးမြှုပ်နှံမှုနှင့်လူမွက်များ ညွှန်ကြားရှ ဦးစီးဌာန သို့ လျှောက်ထား ရမည် ၊

ညွှန်ကြားရေးမျူးဈပ်(တိုယ်စား) (မြင့်သွင်၊ ခုတိုယညွှန်ကြားရေးမျုး)<sub>ကု</sub>

### FORM VI



### RETURN OF ALLOTMENTS THE MYANMAR COMPANIES ACT.

### (See Section 104)

2

| (To  | be filed with  | the Regis  | strar withi | n one mont    | after th  | e allotne      | at is made)      |
|------|----------------|------------|-------------|---------------|-----------|----------------|------------------|
| Rett | im of allotin  | ant from t | he isth     | 01            | Nover     | nber,20        | 2007             |
|      | on the         | of         | 20          | of            | the       | *              |                  |
| Mad  | e pursuant to  | Section    | 104(1)      |               |           |                | ICAL & MACHINERY |
| Nun  | ber of the st  | ares allo  | ted payab   | ile în cash   | COMPAN    | YLIMITE        | 300 Sharee       |
|      |                |            | - U         |               | 1(4)      | 20110003())000 |                  |
| Non  | inal amount    | of the sh  | ares so all | otted         | 110       |                | Ks. 3,000,000/-  |
| 49.  | .44            |            |             | M.            | 1111      |                |                  |
| Am   | ount paid or   | due and p  | ayable on   | cash such s   | hare      |                | Ks. 10,0007-     |
| 1    | -              | 0          |             | 10            | 111       |                | (Fully Paint Up) |
| Nut  | ber of ordin   | ary shares | allotted :  | for a consid  | eration o | ther than      | cash             |
| Non  | ninal amount   | to be ord  | inary shar  | es so allutte | d         |                |                  |
| Am   | ount to be tre | ated as pi | id on eac   | h such share  |           |                |                  |
| The  | consideratio   | n for whit | ch such sh  | iare have be  | en allott | ed is as fo    | tiow -           |

- NOTE In making a return of allotments under Section 104 (1) the Myanmar Companies Act., it is to be noted that -
- 1. When a return include several allotments made on different dates, the actual date of only the first and last of such allotment should be entered at the tip of the front page, and the registration of the return should be effected within one month of the first date.
- When a return relates to one allotment only, made on one particular date, that date only should be inserted and the spaces for the second date struck out and the world made substituted for the world "From" after the world "allotments" above.

Here insert name of Company.

Distinguish between preference, ordinary, or other description of shares.

FORM VI

7531

| I     UAung Hang Oo<br>12/LoMaTa(Naing)<br>025897     No.1120-1121, Tha Min<br>galar Street, 16/4 Ward,<br>Thingsagyun Township,<br>Yangoo,     Merchant     I       2.     Daw Khin Nove Mar<br>Tan<br>13/KaTteMa(Naing)<br>002698     No.1120-1121, Thu Min<br>galar Street, 16/4 Ward,<br>Thingsaggun Township,<br>Yangoo.     Merchant     I                                                                                                                                                                                                          |                         |                                                   | Description | Number of the | sharm aftottol |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------|-------------|---------------|----------------|
| CAulig Hining (30<br>12/LaMaTa(Naing)<br>025897     Sireet, 16/4 Ward,<br>Thingsogon Township,<br>Vongoo     No.1120-1121, Thu Min-<br>galar Street, 16/4 Ward,<br>Tan<br>13/KaTabla(Naing)<br>002698     No.1120-1121, Thu Min-<br>galar Street, 16/4 Ward,<br>Thingsogon Township,<br>Yangoo     Sireet, 16/4 Ward, | Name & N.R.C No         | Address                                           | Description | Freference    | Ordinary       |
| Z. Daw Khan Never Mar     No.3120-1121, 110 min       Tan     galar Street, 16/4 Ward,       13/KaTabla(Naing)     Thingangoun Township,       002698     Yangoo.                                                                                                                                                                                                                                                                                                                                                                                         | 12/LoMaTa(Naing)        | galar Street, 16/4 Ward,<br>Thängangyun Township, | Merchant    |               | 150            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tun<br>13/KaTuNa(Naing) | galar Street, 16/4 Ward,<br>Thingangyun Township, | Merchani    |               | 15             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                                                   |             | Total         | 30             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                                                   |             |               |                |

UN

10.6.2007

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### UAuug Hining On (MD) Presented for filing by i.

.....

Shares

PORM VI

Signature

Dute

| The prant         Nationally.         Usual Residential Address         Colder         Other         Other | Name                                                     | of Company : MTASMAR CB                              | Nume of Compuny : MTANMAR CHEMICAL & MACHINERY CO., IND.                           | Prisonted by :U                 | Frisonted by :U Aust, Haing On |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------|--------------------------------|
| Aung Elaing Oo Mynimar Ho.1120-1121, Thu Mingelar Strewt, Merchant 12/IeMafe Ho.1120-1121, Thu Mingelar Strewt, Merchant (Maing)025857 Yazgou. 15/4, Ward, Thinguagyun Township, Merchant 15/Eafada Ho.1120-1121, Thu Mingelar Strewt, Merchant Mynamar 15/4 Mard, Thingangyun Township, Merchant Mingelar Towara 15/4 Mard, Thingangyun Township, Merchant Mingelar Towara 15/4 Mard, Thingangyun Township, Merchant Mingelar Towara 12/12000 Mingelar Street, Werd No.11, Murchant 12/122378 South Othelapa Township, Tangon. 12/122378 South Othelapa Township, Tangon. (Maing 1025982 Month Othelapa Township, Tangon.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The prisint<br>christing name<br>or names of<br>surnumes | Nationality,<br>National<br>Registration<br>Card No. | Upual Residential Address                                                          | Deher<br>Business<br>Occupation | Children                       |
| w khin Kwe Mar Tun<br>15/RaTada Ko.1130-1121, Thingangrum Township.<br>15/N Ward, Thingangrum Township.<br>(Haing)3025693 Yangun.<br>Mo.157, Thinathu Sureet, Ward No.11, Marchaut<br>12/Fagme South Orbalapa Township, Tangon.<br>(Maing)025982 South Orbalapa Township, Tangon.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0 Aung Ristag Do                                         | Mganmar<br>12/IaMaTa<br>(Naing)025897                | Ho.1120-1121, Thu Mingeler Strout,<br>15/4, Ward, Thingangyun Townsaip,<br>Ymagou, | Werchart                        | Meacgluig Director             |
| tif Han Myanmar No.157, Phihathu Sureet, Ward No.11, Marahant<br>12/Fe.ZaTe South Orbalapa Township, Yangoo.<br>(Maing)025982                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | haw Khin Nye Kar Tun                                     | Myanaar<br>15/EsTafa<br>(Baing)002698                | Ho.1130-1121. Thu Mingalar Streat.<br>15/4 Tard. Thingangrum Township.<br>Yangon.  | Merchant.                       | Di.rector                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0 Miń Ban                                                | #7anmar<br>12/Fa ZaTa<br>(Maing)025982               | Ho.167, Thihathu Street, Ward No.11,<br>South Okkalaya Township, Yangoo.           |                                 | hipolun<br>w.e.f.              |

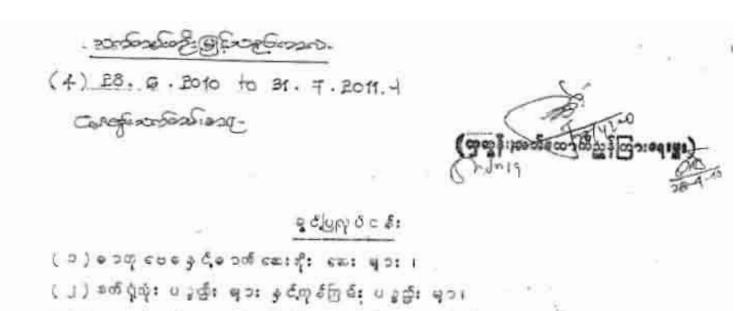
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11.00

ORIGINAL 1 Name and Address of Enterprise 4. Registration No. & Date 30 10 2001 လုပ်ငန်းအမဲ့သိနှင့်လိပ်စာ ကြီးကြပ်ဘုမ္မတ်နှင့် နေ့ခွဲ MYANMAR CHEPICAL & MACHINERY CO. LTD. Union of Myanmar Ministry of Commerce NO. 1420-1121, THU MINGALAR ST. 14962 Directorate of Trade 15/4 WARD, THINGANGYUN T/S. ပြည်ထောင်ခြေမာနိုင်ငံတော်အစိုးရ YANGON. စီးပွားရေးနှင့်ကွာသန်းရောင်းရယ်ရေးစန်ကြီးဌာန 2. Contact No ဆက်သွယ်ရန် ကုန်သွယ်ရေးသွန်ကြားမျှင်းစီးရွာန 566582 CERTIFICATE OF EXPORTER/MPORTER Telephone No. Fax No. Telex No. REGISTRATION တံလက်ခ်န်ပါတ် တယ်လီခန်းနံပါတ် ນກຳ້ອໍລະບໍ່ດຳ ထုတ်ကုန်သွင်းကုန်းလုပ်ငန်းရှင် ဖုတ်ပုံတင်လက်မှတ် 3. Business Registration No. 668/2001-2002 Note: Please tick (V) where applicable သက်ဆိုင်ရာအတွက်ကိုအမှန် အမှတ်အသားဖြပါ လုပ်ငန်းခုတ်ပုံတင်အမှတ် 5. Type of Business လုပ်ငန်းအမျိုးအစား a) Sole Proprietorship b) Partmenship c) Limited Company d) Co-operative Society (Myanmar or Foreign) ., တစ်ဦးတည်းမိုင် လီမီတက်ကုမ္ပဏီ (မြန်မာ/နိုင်ငံခြား) သမ္မာပါယမူအသင်း အစုပေါ် TRADING a) Others ( please specify) ဘက္ေ(ခက်မြေကြ်ႏ) ေတာ့ဝဘက်ပဲလုပ်ငန်း (၅) မိုးနေသင်ရက်ခွင်ရှီသည်။ 6. Terms and Conditions epurnul amburo I hereby register the above mentioned enterprise as Exporter importer subject to the following terms and conditions: အောက်ဖတ်ပြပါစည်းကမ်းချက်များဖြင့် ထုတ်ကုန်သွင်းကုန်လုပ်ငန်းရှင်အဖြစ် မှတ်ပုံတင်ခွင့်ပြ သည်။ (a) Line of goods permitted all items except prohibited and restricted -items. ခွင့်ပြသည်ကုန်ပစ္စည်းအမျိုးအမည် တားမြစ်ကန့် သတ်ထားသော ကုန်မစ္စည်းအမယ်မှုစးမှုလွှဲ၍ ကျွန်မစ္စည်းများအားလုံး (b) The enterprise must ablde by the Export/Import Rules and Regulations prescribed for the registered ExporteralImporters. လုပ်ငန်းရှင်သည်မှတ်ပုံတင်ထုတ်ကုန်သွင်းကုန် လုပ်ငန်းလုပ်ကိုင်သူများ လိုက်နာရမည် စည်းကမ်းခွက်များကို လိုက်နာရမည်။ year(a) up to \_\_\_\_\_\_ 30-10-2001 TO 29-10-2004 THREE (c) The registration is valid for မတ်ပဲ့တင်သက်တမ်း For DIRECTOR GENERAL ညွှန်ကြားရေးများချပ်(ကိုယ်စား) 19.5 Stamp ရိတ်ဆိပ် Extension of Export Import Registration Period ထုတ်ကုန် သွင်းကုန်လုပ်ငန်း လုပ်ငန်းရှင်မှုတိုပ်တစ်ဆာ သက်တမ်းတို့မြှင့်ပေးခြင်း suthorised Signature & Name Penod Extended ခွင့်ပြုသူလက်မှတ်နှင့်အမည် သက်တမ်းတိုးဖြစ်သည်ကာလ + man = >> Durg + 1 Bin of - you (1) 30 10 2004 up to 23 d. 2005 TAUNG SO UTY DIRECTOR (2) 30.4.2005 up to 31.7 2007 SEISTANT DE (3) 30-5-2008 up to 3:-7-2009 IAW-DEPUTY DIRECTO (co Reg- 20 months 1 217 og



(၃) ဆားဝက်ကွေဖီ ဧရေးလွယ်ပန်း သို့း ပဉ္ဦး များ ခွင့်ခေ့က် ဆား များ၊

(၄)လွှိပ်စစ်နှင့်သံလေက်တောင်ရေ၁နစ်ကုန်ပဋဘုံး များ၊၊

(၅)ယာ၁ဦးနှင့်စကဲကေါ်ရီယာ၁နှင့်ဆမ့်ပြမှုသွာ်: မျင်း၊

### FORM VI



### RETURN OF ALLOTMENTS THE MYANMAR COMPANIES ACT.

### (See Section 104)

2

| (To  | be filed with  | the Regis  | strar withi | n one mont    | after th  | e allotne      | at is made)      |
|------|----------------|------------|-------------|---------------|-----------|----------------|------------------|
| Rett | im of allotin  | ant from t | he isth     | 01            | Nover     | nber,20        | 2007             |
|      | on the         | of         | 20          | of            | the       | *              |                  |
| Mad  | e pursuant to  | Section    | 104(1)      |               |           |                | ICAL & MACHINERY |
| Nun  | ber of the st  | ares allo  | ted payab   | ile în cash   | COMPAN    | YLIMITE        | 300 Sharee       |
|      |                |            | - U         |               | 1(4)      | 20110003())000 |                  |
| Non  | inal amount    | of the sh  | ares so all | otted         | 110       |                | Ks. 3,000,000/-  |
| 49.  | .44            |            |             | M.            | 1111      |                |                  |
| Am   | ount paid or   | due and p  | ayable on   | cash such s   | hare      |                | Ks. 10,0007-     |
| 1    | -              | 0          |             | 10            | 111       |                | (Fully Paint Up) |
| Nut  | ber of ordin   | ary shares | allotted :  | for a consid  | eration o | ther than      | cash             |
| Non  | ninal amount   | to be ord  | inary shar  | es so allutte | d         |                |                  |
| Am   | ount to be tre | ated as pi | id on eac   | h such share  |           |                |                  |
| The  | consideratio   | n for whit | ch such sh  | iare have be  | en allott | ed is as fo    | tiow -           |

- NOTE In making a return of allotments under Section 104 (1) the Myanmar Companies Act., it is to be noted that -
- 1. When a return include several allotments made on different dates, the actual date of only the first and last of such allotment should be entered at the tip of the front page, and the registration of the return should be effected within one month of the first date.
- When a return relates to one allotment only, made on one particular date, that date only should be inserted and the spaces for the second date struck out and the world made substituted for the world "From" after the world "allotments" above.

Here insert name of Company.

Distinguish between preference, ordinary, or other description of shares.

FORM VI

7531

| I     UAung Hang Oo<br>12/LoMaTa(Naing)<br>025897     No.1120-1121, Tha Min<br>galar Street, 16/4 Ward,<br>Thingsagyun Township,<br>Yangoo,     Merchant     I       2.     Daw Khin Nove Mar<br>Tan<br>13/KaTteMa(Naing)<br>002698     No.1120-1121, Thu Min<br>galar Street, 16/4 Ward,<br>Thingsaggun Township,<br>Yangoo.     Merchant     I                                                                                                                                                                                                          |                         |                                                   | Description | Number of the | sharm aftottol |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------|-------------|---------------|----------------|
| CAulig Hining (30<br>12/LaMaTa(Naing)<br>025897     Sireet, 16/4 Ward,<br>Thingsogon Township,<br>Vongoo     No.1120-1121, Thu Min-<br>galar Street, 16/4 Ward,<br>Tan<br>13/KaTabla(Naing)<br>002698     No.1120-1121, Thu Min-<br>galar Street, 16/4 Ward,<br>Thingsogon Township,<br>Yangoo     Sireet, 16/4 Ward, | Name & N.R.C No         | Address                                           | Description | Freference    | Ordinary       |
| Z. Daw Khan Never Mar     No.3120-1121, 110 min       Tan     galar Street, 16/4 Ward,       13/KaTabla(Naing)     Thingangoun Township,       002698     Yangoo.                                                                                                                                                                                                                                                                                                                                                                                         | 12/LoMaTa(Naing)        | galar Street, 16/4 Ward,<br>Thängangyun Township, | Merchant    |               | 150            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Tun<br>13/KaTuNa(Naing) | galar Street, 16/4 Ward,<br>Thingangyun Township, | Merchani    |               | 15             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                                                   |             | Total         | 30             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                                                   |             |               |                |

UN

10.6.2007

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### UAuug Hining On (MD) Presented for filing by i.

.....

Shares

PORM VI

Signature

Dute

|                                                           |                                                       | MANAGERS AND MANAGING AGENTS AND OF A<br>(Myonmar Companies Act, See Section 87)<br>INVICAL & MADRIFERT CO., 1470. | ,                               | kung Histog 00                           |
|-----------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------|
| The pressal<br>chrestian usans<br>or names of<br>surnames | Nationality.<br>National<br>Registration<br>Caril No. | Usual Residential Adviress                                                                                         | Öther<br>Businesi<br>Occupation | Chinger                                  |
| T AVAG Hising 🖎                                           | Myanukr<br>12/LoMaTa<br>(Naing)025897                 | No.1120-1121, The Mingelar Street,<br>16/4, Mard, Thingangyon Township,<br>Tangou.                                 | 'No rebeat                      | Wanczing Ofrector                        |
| Dew Khin Nwe Mar Tun                                      | Nyadump<br>13/ZoTofa<br>(Naidg)002698                 | No.1140-1131, Thu Murgalar Street.<br>16/% Ward, Thungangyun Township.<br>Yangon.                                  | Kerchest.                       | Director                                 |
| U Miń Ern                                                 | Nyalmar<br>12/Fu2ata<br>(Sains)025982                 | No.167, Thihathu Street, Ward No.11,<br>South Orkalapa Township, Yongon.                                           | Mé robaut                       | 2003 btod 48 Directo<br>w.e.f. 12.1,2005 |

NOTE : (1) A complete list of the Directors or Managers of Managing Agents shown as existing to the last particulars.

(2) A noise of the changes since the last list should be made in the column for "Changes" by placing against the new Disector's once the word "in place of ..... and by writing against any former Director's name the word "dead" "resigned" or in the case may be giving the date of change septimat the energy

V .....

Saled this . 12.2.2005

Signature Khin Nive Mar Tun 

| 12/LaMaTa (Naing)       Thingangyun Township, Yangon.         025897       025897         Daw Noe Noe Su Aung       Myanmar         12/ThaGaKa (Naing)       Thingangyun Township, Yangon.                                                                          | nges |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Daw Noe Noe Su Aung     Myanmar     No.1120-1121, Thu Mingalar Street, 16/4 Ward,     Merchant     Appointed Astriction       Director     12/ThaGaKa (Naing)     Thingangyun Township, Yangon.     Director                                                        |      |
| 12/ThaGaKa (Naing) Thingangyun Township, Yangon.                                                                                                                                                                                                                    | xtor |
| 185395 w.e.f. 19.3.20                                                                                                                                                                                                                                               |      |
| Daw Khin Nwe Mar Tun     Myanmar     No.1120-1121, Thu Mingalar Street, 16/4 Ward,     Merchant     Resigned From Director       12/ThaGaKa (Naing)     002698     002698     No.1120-1121, Thu Mingalar Street, 16/4 Ward,     Merchant     Resigned From Director |      |

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19.3.2018 Dated this .....

Signature ...... Designation

Michae (Frank) - Brite Michae (Frank) Mysist (Chemica) - Scourse

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Form (26)

Transfer of Shares MYANMAR CHEMICAL & MACHINERY CO., LTD Daw Khin Nwe Mar Tun (13/KaTaNa (Naing) 002698) No.1120-1121, Thu Mingalar Street, 16/4 Ward, Thingangyun Township, Yangon. of Ks. 2,600,000/in consideration of the sum of Daw Noe Noe Su Aung (12/ThaGaKa (Naing) 185395); paid to me by No.1120-1121, Thu Mingalar Street, 16/4 Ward, Thingangyun Township, Yangon. do 260 hereby transfer to the said transferee the shares number to standing in my name in the Books of the abovenamed Company to hold unto the said transferee, his Executors, Administrations, and Assigns, subject to the several conditions on which I held the same at the time execution there of and I the said transferee do hereby agree to take the said shares subject to the same conditions. As witness our hands the _16th_____ day March 2018 Witness Transferor Daw Khin Nwe Mar Tun U Aung Hlaing Oo 12/LaMaTa (Naing) 025897 13/KaTaNa (Naing) 002698 Designation Merchant Designation Merchant Address Address No.1120-1121, Thu Mingalar Street, 16/4 Ward, No.1120-1121, Thu Mingalar Street, 16/4 Ward, Thingangyun Township, Yangon. Thingangyun Township, Yangon. တစ်လွှဲတဲ့ဆိုမိုခေါ်င်း SHARE TRANSFER Transferee Daw Noe Noe Su Aung 1000 12/ThaGaKa (Naing) 185395 Merchant မ္မာလဲတံဆိမိခေါ်မီး Designation SHARE TRANSFER K 1000 Address တစ်လွှတ်ဆိုစီခံခါင် No.1120-1121, Thu Mingalar Street, 16/4 Ward, SHARE TRANSFER Thingangyun Township, Yangon. K 100

မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ အစုရှယ်ယာများဖြင့် ပေးရန်တာဝန် ကန့်သတ်ထားသော အများနှင့် မသက်ဆိုင်သည်ကုမ္ပဏီ မြန်မာ ဓါတ္ခဗေဒ နှင့် စက်ပစ္စည်း ကုမ္ပဏီ ထိမိတက် ၏ သင်းဖွဲ့မှတ်တမ်း ရင့် သင်းဖွဲ့စည်းမျဉ်းများ THE MYANMAR COMPANIES ACT PRIVATE COMPANY LIMITED BY SHARES MEMORANDUM OF ASSOCIATTON AND ARTICLES OF ASSOCIATION OF MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED

မြန်မာနိုင်ငံ ကုမ္ပဏ်များ အက်ဥမမေ

အစုရယ်ယာများဖြင့် ပေးဂုန်တာဝန် ကန့်သက်ထားသော အများနှင့် မသက်ဆိုင်သည့်ကုမ္ပဏ် ည်းက အျက္ခ်က္ကန္နဲ့ အျက္ခ်က္ **ကုမ္ပဏီ လိမိတက်** ŝ သင်းဖွဲ့မှတ်တမ်း ĘĈ သင်းဖွဲ့စည်းမျဉ်းများ

THE MYANMAR COMPANIES ACT

PRIVATE COMPANY LINGTED BY SHARES

the ter ter to

Memorendum El Association AND

Articles Of Secontation.

OF

MARINE OF STATES COMPANY LIMITED

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ဖြင့်စာနိုင်ပံ၊ ကုန္ပင်းရား၊ ေက်ဥပဒေ

အခုရှယ်ယာများဖြင့် ပေးရနံကာဂန် ကန့်ဆတ်ထားစောင် အများနှင့် သေက်ဆိုင်ဆည့် ကုန္ဒ၏

င်ကလမ်းတိုင်ရှိနော်မျှင်း သည့်သည်။ မို သင်းရွံနော်လစ်န

the type of the type the the

သ အမွန်ဆိုင်း အခြောင်းကြင်း သို့သေး သို့သည်။ ကျွန်နား အိန်ကတ် ကြိုင်းသည်

း ကျွန်းကို အည်းသောင်းခြင်းကို ကွည့်ခုသိရာကိုရေးမှာခဲ့အမ်းကိုတော့ကိုနှင့်ပါကကိုင်း ဖြစ်ပါသည့်

၄။ 🥂 အရားခံချေး၏ မေးရန်တာဝန်ကို လန့်သတ်ထာ သည်။

၅။ အုမ္မႈမ်ိဳ၏ သတိမ္မတီများညိုင္ရေရင်းသည့္ တျင်းျပည္က က လက္လာက ၇၂၇ / – (တျပီ လက္လာက က လက္လာက က လက္လာက လက္လာက က လက္လာက ၇၂၇ – ၂ / – (တျပီ လက်မ္းမေန႔ အက္လာက လက်လာက က လက္လာက က လက္လာက က လက္လာက က လိုးနီးရွေလိုးတုန္းဆီးေရးရွားရွားရွားသင့္ က လက္လာက က လက္လာက လက္လာက လက္လာက လက္လာက လက္လာက လည္းမေရာက္က လက်လဲ့းတူးကို အားကိုးအကားက က လူံးလြန္ရိုင္ရိုင္ရိုင္ရိုင္ရဲ့လို႔ေရာက္လာက လုံးလွဲ႔ လွ်င္လို႔ေရာက္လာန အားက တရွိစစ္စရာညိဳ။

- အောက်ဖော်ပြပါ အစိုးရကနွင့်ပြုသော ကုန်ပစ္စည်းများနှင့် ထုတ်ကုန်များကို မိဒိတစ်ဦးတည်းဖြစ်စေ မည်သည့်ပြည်တွင်း၊ ပြည်ပဖုဂ္ဂိုလ်များနှင့် ဖက်စပ်၍ဖြစ်စေ သွင်းကုန်လုပ်ငန်းရှင်များ၊ ထုတ်ကုန်လုပ်ငန်းရှင် များ၊ လက်ငင်လက်ကားရောင်းချသူများ၏ ကူးသန်းရောင်းဝယ်ရေးဆိုင်ရာ လုပ်ငန်းချားကိုလုပ်ကိုင်ရန်။
 - (က) လယ်ယာကိုင်းကျွန်းနှင့် ဥယျာဉ်ခြံမြေထွက်ကုန်ပစ္စည်းများ၊
 - (၈) သစ်တောထွက်ပစ္စည်းနှင့် ထပ်ဆင့်တိုးတန်ဖိုးမြှင့် သစ်အခြေခံကုန်ပစ္စည်းများ၊
 - (ဂ) တိရစ္ဆာန်ထွက်ကုန်ပစ္စည်းနှင့် တိရစ္ဆာန်အစားအစာ၊
 - (ဃ) ရေထွက်ကုန်ပစ္စည်းများ၊
 - (င) ဓာတ်မြေဩဇာနှင့်ပိုးသတ်စေးများ၊
 - (စ) ဓာတ္ေဒနှင့် ဓာတ်ဆေးဆိုးဆေးများ၊
 - (သ) စက်ရုံသုံးပစ္စည်းများနှင့် ကုန်ကြမ်းပစ္စည်းများ၊
 - (၈) အိမ်သုံးကုန်ပဝွည်းများ၊
 - (ဈ) လူသုံးဂဍနိပဖ္စည်းများ
 - (ည) ဆောက်လုပ်ရေးလုပ်ငန်းသုံးမစ္စည်းများနှင့်သုတ်ဆေးများ၊
 - (၌) လျှပ်စစ်နှင့်အီလက်ဘရောနစ်ကုန်ပစ္စဥ်နှင့်ရမား၊
 - (၌) ဟာဉ်နှင့်စက်ကိရိဟာနှင့်အမှီပစ္စည်းများ၊
 - (ဥ) ကိရိယာကန်ဆာလောခေမျိုးမျိုး၊
 - (ဎ) ေလးနှင့်ဆေးပစ္စည်းများ-
 - (က) ဘးသောက်ကုန်နှင့် အတွေထွေကုန်ပစ္စည်းများ၊
 - (တ) အထည်အလိပ်နှင့် အဝတ်အထည်များ၊
 - (ထ) ၀က္ကူ၊ စာရေးကိရိဟာနှင့် ဓာတ်ပုံပစ္စည်းများ၊
 - (၁) ရုံးသုံးပစ္စည်းများနှင့် ပညာရေးအထောက်အကူမြုပစ္စည်းများ
- (၂) ကုမ္ပဏီမှ သင့်လျှော်လျှောက်မတ်သည်ဟု ဟူဆပါက ကုမ္ပဏီ၏စီးမွှားရေးလုပ်ငန်းတွင် အကျိုးရှိစေရန် အတွက် မည်သည့်ပုဂ္ဂိုလ်၊ စီးမွှားရေးအဖွဲ့အစည်း၊ ကုမ္ပဏီ၊ ဘဏ် သို့မဟုတ် ရွှေကြေးအဖွဲ့အစည်းထံမှမဆို ငွေချေးပဉ္စရန်။
- န္တြင်းချက်။ ။ ကုမ္ပဏီသည် အတက်ဖော်ပြပါ ရည်ရွယ်ချက်များကို ပြည်ထောင်စုမြန်မာနိုင်ငံတော်အတွင်း၌ ဖြစ်ဝေ၊ အခြားမည်သည့် အရပ်ဒေသ၌ဖြစ်ဝေ၊ အချိန်ကာလအင်ဒိုက် တည်မြဲနေသော တရား ဥပဒေများ၊ အမိန့်ကြော်ငြာစာများ၊ အမိန့်များက ရွှင့်ပြုထားသည့် လုပ်ငန်းများမှအမ အခြားလုပ်ငန်း များကို လုပ်ကိုင်ဆောင်ရွက်ခြင်းမပြုပါ။ ထို့အပြင် ပြည်ထောင်စု မြန်မာနိုင်ငံတော်အတွင်း၌အချိန် ကာလအမားလျော်စွာ တည်မြဲနေသည့် တရားဥပဒေပြဋ္ဌာန်းချက်များ၊ အမိန့်ကြော်ငြာစာများ အမိန့်များနှင့် လျော်ညီသင့်တော်ခြင်း၊ သို့မဟုတ် ခွင့်ပြုံထားခြင်းရှံမှုသင့်နှံ ကောင်ရွက်ခြင်းခဲ့များကို ဆောင်ရွက်မည်ဟု ခြင်းချက်ထားရှိပါသည်။

(c)

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အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာ ဖုံလင်စွာပါသော ယေားတွင် လက်မှတ်ရေးထိုးသူ ကျွန်ုပ်တို့ ကိုယ်စီကိုယ်ငှသည် ဤသင်းဖွဲ့မှတ်တမ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့်အလျောက် ကျွန်ုပ်တို့၏ အမည်အသီးသီးနှင့် ယှဉ်တွဲ၍ ပြထားသော အစုရှယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည့်ဝင်ရယူကြရန် သဘောတူကြပါသည်။

စဉ်	အစုထည့်ဝင်ဘူများ၏ အမည်၊ နေရပ်လိပ်စာနှင့် အလုပ်အကိုင်	နိုင်ငံသားနှင့် အမျိုးသား မှတ်ပုံတင်အမှတ်	၀ယ်ယူသော အစုရှယ်ယာ ဦးဧရ	ထိုးမြဲလက်မှတ်
Э II	$\frac{1}{2} = \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \right\} + \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \right\} + \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \right\} + \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \right\} + \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \left\{ \frac{1}{2} \right\} + \frac{1}{2} \left\{ \frac{1}{2$			Jan Jelandon
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ရန်ကုန်။ နေ့ဗွဲ၊ ၂၁၉ ခုနှစ်၊ လ၊ ရက်။ အထက်ပါ လက်မှတ်ရှင်များသည် ကျွန်ုပ်၏ ရှေ့မှောက်တွင် လက်မှတ်ရေးထိုးကြွပါသည်။

ခြန်းသင့်ခိုင် ကုန္ခရင်များ၊ အင်္ဂနိုပ်ခေ

အႏွင့္မတိုလာများဖြင့္ စားရနီတာ၀နီး ကန္နီလတိစားစောင္ အဖုခုကုန္နင့္ တက်န္နီငံသည့္ ကုန္နင့္ပါ

ေးကို ကိုလိုက်ရောက် ကြိုလိုက်ခဲ့တဲ့ကို

ଙ୍ଗା

သင်းဖွဲ့စည်းမျှဉ်းများ

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ာ။ ဤသင်းဖွဲ့ စည်းမျဉ်းနှင့် လိုက်လျောညီတွေမဖြစ်သည့် စည်းမျဉ်းမျှားမှအပ၊ မြန်မာနိုင်ငံ ကုမ္ပဏီများအက်ဥပဒေ နောက်ဆက်တွဲ ဂထမဟေးပုံငံ 'က' ပါ စည်းမျဉ်းများသည် ဤကုမ္ပဆီနှင့် သက်ဆိုင်ငေရမည်။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ၊ အက်ဥပဒေပုဒ်မ ၁၇(၂)တွင် ဖော်ပြပါရှိသည့် မလိုက်နာ နေနဲ့ရ ငည်းမျဉ်းများသည် ဤကုမ္ပဏီနှင့် အစဉ်သဖြင့် သက်ကိုင်စေရမည်။

အလူဝနှင့် <mark>သေက်ဆိုင်</mark>သေင အုန္တထိ

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- ွမ ႏွစ်ကုန္ဒဏီသည် အများနှင့် ဘောင်ဆိုင်သည် ကုမ္ပဏီဖြင်၍ အောင်ခံပါတတ်နတ်မျက်မှုသား ည အက်မြံဆက်လူသင် သန်းမည်။
 - းသင့်များခဲ့ရက်က ပေါင်းကားသားသည်။ မေနေရာနာနာကြည်း အချက်မှုကြောင့်ကြားနားကိုက်ကြည်း ကိုက်ချိုက်ကို ကြည်း ကျင်းစားစားသည်။
 - ္လား ကြန္းက က အခုရွယ်မွာ ေရွမဟုတ္၊ ရောင္ရဲေလ့်ေရာင္လိုင္းကို အီထင္ရွိရာမဟုတ္(ရိ) တယ္ခ်မ္ရာအတွက် ေျပည္ပါ အရက္ခ်ေရာင္ရင္က်ေရာင္ရန္ကာက အမ်ိဳးလူမ်ိဳးဖြင့္ မမြတ္ခြင့္ရမိ စာတမြစီထားသည်။

ေးသည့္အိုဂုခ်ိဳးနိုးစစ္စနှင့် ေအခုရုတ်လာ

သန္ဆားမ်ားသည့္မရာ သူတို႔ရာစည္ကို မွန္မာလမ္းသည့္ လုန္မာကို လိုင္ရာကို လိုင္ရာကို လိုင္ရာကို လိုင္ရာကို လိုင္ရာကို လက္ရက္ကိုင္ရာကို လိုင္ရာကို လိုင္ရာကို ကိုင္ရာကိုက်က္ကို ကာနိုင္တာကို ကိုင္ရာကို လိုင္ရာကို လိုင္ရာကို လိုင္ရာကို လူန္အားစီးေရးကိုးနဲ့ အေရာကို ကုန္မာကိုက်က္က စည္းမျခံမျခင္းနဲ့ ရိုင္းလဲ စီးစရားစစ္ တည္ဆဲဆိုရြစီနေတော့ တရားဥလာ ႏြင့္အားရက်က ယရင္နဲ အညီေတာ့ စက္ေရာက္ကေလးလဲ ျပည္လကို အားည်းေလးရဲ႕ စစ္ပ်ိဳးမြင္စြင္စိုင္စိစ္စခိုး၊ စက္လမ္းနဲ့နဲ႔ မြစ္စံေ ႏိုင္ငံနဲ႔ အားကာကို စတ္ျမည္။

ဖြန်းကရိုင်ငံအုန္စဏီမွား ေက်ဥမခေဝါ ပြဋ္ဌရန်းမျကိမ္မားကို မတိရိုက်မေရာ့ကို အမုန္မယ်ယာများကည့် ခါရဲ့ကဲကာ များ၏ ကြီးကြစ်တွင်တဲ့ဖူး အောင်တွင် ရှိစေရမည်။ ၄င်းဒါရိုက်ထာများထည့်၊ င်ငန်းလျင်းထား မျက်ခဲ့သော ထက်မှတ်မျက် အခြေအာန တစ်ရဲတင်လျားဖြင့် အမုရှယ်ထာများကုန်စေများထည့်ကျင်းကို သော်ကျင့်ရောကျင် ကိုသို စောင်ရက်နိုင်သည်။

- အစုရှယ်ယာလက်မှတ်များကို အထွေတွေမန်နေဂျာ သို့မဟုတ် ဒါရိုက်တာအဖွဲ့က သတ်မှတ်သည့် အခြားပုဂ္ဂိုလ် များကလက်မှတ်ရေးထိုး၍ ကုမ္ပဏီ၏တံဆိပ် ရိုက်နှိပ်ထုတ်ပေးရမည်။ အစုရှယ်ယာ လက်မှတ်သည် ပုံပန်းပျက်ခြင်း၊ ပျောက်ဆုံးခြင်း၊ သို့မဟုတ် ပျက်စီးခြင်းဖြစ်ပါက အဖိုးအခဖြင့် ပြန်လည်အသစ်ပြုလုပ်ပေးမှုကို သော်လည်းကောင်း ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆသော အခြားလက်သေခံ အတောက်အထား၊ တစ်စုံတစ်ရာကို ဘင်ပြ စေ၍သော်လည်းကောင်း ထုတ်ပေးနိုင်သည်။ ကုယ်လျှန်သွားသော အစုရှယ်ယာရှင်တစ်ဦး၏ တရားပင် ကိုယ်စား လှယ်ကို ဒါရိုက်တာများက အသိအမှတ် ပြုပေးရမည်ဖြစ်သည်။
- ဒါရိုက်တာများသည် အစုရှင်များက ၄င်းတို့၏ အစုရှယ်ယာများအတွက် မပေးသွင်းရသေးသော ငွေများကိုအခါ အားလျော်စွာ တောင်းဆိုနိုင်သည်။ အစုရှင်တိုင်းကလည်း ၄င်းတို့ထံတောင်းဆိုသည့် အကြိမ်တိုင်း အတွက် ခါရိုက်တာများက သတ်မှတ်သည့် ပုဂ္ဂိုလ်များထံ သတ်မှတ်သည့်အချိန်နှင့် နေရာတွင် ပေးသွင်းစေရန် တာဝန်ရှိစေ ရမည်။ ဆင့်ခေါ်မှုတစ်ခုအတွက် အရစ်ကျပေးသွင်းဖေခြင်း၊ သို့မဟုတ် ပယ်ဖျက်ခြင်း သို့မဟုတ် ရွှေ့ဆိုင်းခြင်းတို့ကို ဒါရိုက်တာများက သတ်မှတ်နိုင်သည်။

ခါ ရို က်ဴတာ**းများ**

၇။ သင်းလုံးကျွတ် အစည်းအဝေးက တစ်စုံတစ်ရာ သတိမှတ်ပြဋ္ဌာန်းမှု မပြုလုပ်သမျှ ဒါရိုက်တာများ၏ အရေ အတွက်သည် (💡) ဦးထက်မနည်း၊ (👝) ဦးထက်မများစေရ။

ပထမဒါရိုက်တာများသည် –

- (ə) (ç)
- (၅) ဘိုမြစ်ကြပါသည်။
- း ဒါရိုက်တာများသည် ၄င်းဘို့အနက်မှ တစ်ဦးကို မနီနေဂျင်းဒါရိုက်တာအဖြစ် အချိန်အဝါတလိဝဉ် သင့်လျော်သော သဘ်မှတ်ချက်များ၊ ဉာဏ်ပူဇော်များဖြင့် နေ့ထားရမည်ဖြစ်ပြီး အဓါအားလျော်စွာ ဒါရိုက်တာအဖွဲ့က မေးအပ်ယော အာဏာများ အားလုံးကို ၄င်းက အသုံးပြုနိုင်သည်။
- ၉။ ဒါရိုက်တာတစ်ဦးဖြစ်မြှောက်ရန် လိုအပ်သော အရည်အချင်းသည် ကုမ္ပဏီ၏ အစုရှယ်ယာ အနည်းဆုံး (🤗 🤅)စု ကို ပိုင်ဆိုင်ခြင်းဖြစ်၍ ၄င်းသည် မြန်မာနိုင်ငံ ကုမ္ပဏီများအက်ဥပဒေပုဒ်မ ၈၅ ပါ ပြဋ္ဌာန်းချက်များကို လိုက်နာရန် တာဝန်ရှိသည်။
- ား။ အစုရှယ်ယာများ လွှဲပြောင်းရန် တင်ပြချက်ကို မည်သည့် အကြောင်းပြချက်မျှ မပေးဘဲ ဒါရိုက်တာအဖွဲ့သည် ၄င်းတို့၏ပြည့်စုံ၍ ချုပ်ချယ်ခြင်းကင်းသော ဆင်ခြင်တွက်ဆမှုဖြင့် မှတ်ပုံတင်ရန် ငြင်းဆိုနိုင်သည်။

ဒါရိုက်တာများ၏ ဆောင်ရွက်ရျက်များ

- ၁၁။ ဒါရိုက်တာများသည် ၄င်းတို့သင့်လျော်သည် ထင်မြင်သည့်အတိုင်း လုပ်ငန်းဆောင်ရွက်ရန် တွေ့ဆုံ ဆွေးနွေး ခြင်း၊အစည်းအဝေး ရွှေ့ဆိုင်းခြင်း၊ အချိန်မှန်စည်းဝေးခြင်း၊ အစည်းအဝေးအထမြောက်ရန် အနည်းဆုံး ဒါရိုက် တာ ဦးရေသတ်မှတ်ခြင်း တို့ကိုဆောင်ရွက်နိုင်သည်။ ယင်းသို့ မသတ်မှတ်ပါက ဒါရိုက်တာနှစ်ဦး တက်ရောက်လျှင် အစည်းအဝေး အထမြောက်ရမည်။ အစည်းအဝေးတွင် မည်သည့်ပြဿနာမဆို ပေါ်ပေါက်ပါက မန်နေဂျင်းဒါရိုက် တာ၏ အဆုံးအဖြတ်သည် အတည်ဖြစ်ရမည်။ မည်သည့်ကိစ္စများကို မဆို မဲခွဲဆုံးဖြတ်ရာတွင် မဲအရေ အတွက် တူနေပါက သဘာပတိသည် ခုတိယမဲ သို့မဟုတ် အနိုင်မဲကို ပေးနိုင်သည်။
- ာ၂။ ခါရိုက်တာများ၏ အစည်းအဝေးကို မည်သည့်ဒါရိုက်တာကမဆို အချိန်မရွေး ခေါ်နိုင်သည်။

Gi

Ωil

၁၃။ ဒါရိုက်တာ အားလုံးက လက်မှတ်ရေးထိုးထားသော ရေးသားထားသည့် ဆုံးဖြတ်ချက်တစ်ရပ်သည် နည်းလမ်းတကျ ခေါ် ယူကျင်းပသော အစည်းအစေးက အတည်ပြုသည့် ဆုံးဖြတ်ချက်ကဲ့သို့ပင် ကိစ္စအားလုံး အတွက် အကျိုး သက်ရောက်စေရမည်။

ခါရိုက်တာများ၏ လုပ်မိုင်နွှင့်နှင့် တာငန်များ

- ၁၄။ မြန်မာနိုင်ငံ ကုမ္ပဏီများ အက်ဥပဒေ နောက်ဆက်တွဲ ဧယားပုံစံ (က)ပါ စည်းမျဉ်းအပိုဒ် ၇၁ တွင် ပေးအပ် ထားသော အထွေထွေ အာဏာများကို မထိခိုက်စေဘဲဒါရိုက်တာများသည် အောက်ဖော်ပြပါ အာဏာများ ရှိရမည်ဟု အတိအလင်း ထုတ်ဖော်ကြေညာသည်။ အာဏာဆိုသည်မှာ–
 - (၁) ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆဘော တန်ဖိုးနှင့်စည်းကမ်းများ၊ အခြေအနေများ သတ်မှတ်၍ ကုမ္ပဏီက ရယူရန် အာဏာရှိသည့် မည်သည့်ပစ္စည်း၊ အခွင့်အရေးများ၊ အခွင့်အလမ်းများကိုမဆို ဝယ်ယူရန် သို့မဟုတ် အခြားနည်းလမ်းများဖြင့် ရယူပိုင်ဆိုင်ရန်အပြင် ကုမ္ပဏီက ပိုင်ဆိုင်ခွင့်ရှိသော မည်သည့် ပစ္စည်း၊ အခွင့်အရေးများ၊ အခွင့်အလမ်းများကိုမဆို သင့်တော်သော စည်းကမ်းချက်များ သတ်မှတ်၍ ရောင်းချခြင်း၊ အငှားချခြင်း၊ စွန့်လွှတ်ခြင်း၊ သို့မဟုတ် အခြား နည်းလမ်းများဖြင့် ဆောင်ရွက်ခြင်းဘို့ကို ပြုလုပ်ရန်။
 - (၂) သင့်လျော်သော စည်းကမ်း သတ်မှက်ချက်များဖြင့် ငွေကြေးများကို ချေးငှားရန် သို့မဟုတ် အဆိုပါချေးငှားသော ငွေကြေးများကို ပြန်လည် ပေးဆပ်ရန်အတွက် အာမခံများ ထားရှိရန်အပြင်၊ အထူးသဖြင့် ဤကုမ္ပဏီ၏ ဒီတင်ချာများ၊ ဒီဘင်ချာစတော့(ခ်)များ၊ ခေါ်ယူခြင်း မပြုရသေးသော ရင်းနှီးငွေများ အပါအဝင် ယခုလက်ရှိ နှင့် နှောင်ရှိမည့် ပစ္စည်းပျားအားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို အပေါင်ပြု၍ ထုတ်ဝေရန်။
 - (၃) ဤဂုမ္ပဏီက ရယူထားသော အခွင့်အရေးများ သို့မဟုတ် ဝန်ဆောင်မှုများအတွက် အားလုံး သို့မဟုတ် တစ်စိတ်တစ်ခေသကို ငွေကြေးအားဖြင့် ပေးချေရန်၊ သို့မဟုတ် အစုရှယ်ယာများ၊ ငွေချေးစာချုပ်များ၊ ဒီတင်ဈာများ၊ သို့မဟုတ် ဤကုမ္ပဏီ၏ အခြားသော အာမခံကချုပ်များကို ထုတ်ပေးရန်၊ ထိုအပြင် အဆိုပါ အစုရှယ်ယာများ ထုတ်ပေးရာ၌ ငွေအပြည် ပေးသွင်းပြီးသော အစုရှယ်ဟာအနေဖြင့် သော်လည်းကောင်း၊ တစ်စိတ်တစ်ခေသ ပေးသွင်းပြီးသော အစုရှယ်ယာများ အနေဖြင့် သော်လည်းကောင်း သဘောတူညီသကဲ့သို့ ထုတ်ဝေပေးရန်နှင့် အဆိုပါ ငွေချေးစာချုပ်များ၊ ဒီတင်ရာများ ထိုမဟုတ် ကုမ္ပဏီ၏ အခြားသော အာမခံ စာချုပ်များဖြင့် ထုတ်ဝေပေးရာ၌ ခေါ်ဆိုခြင်း မပြုရသားသော ၎င်းနီးခွေမှုခံ၊ အငါအငင်္နှော်ကုမ္ပဏီအိ ပစ္စည်းအားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို အပေါင်ပြု၍ဖြစ်စေ၊ ထိုကဲ့သို့မဟုတ်ဘဲဖြစ်စေ ထုတ်ပေးရန်။
 - (၄) ဤကုမ္ပဏီနှင့် ပြုလုပ်ထားသော ကန်ထရိုက်စာချုပ်များ၊ တာဝန်ယူထားသည့် လုပ်ငန်းများ ပြီးစီးအောင် ဆောင်ရွက်စေခြင်း အလို့ငှာ ခေါ်ယူခြင်း မပြုရသေးသော ရင်းနှီးငွေများ အပါအဝင် ဤကုမ္ပဏီ၏ ပစ္စည်းရပ်များ အားလုံး သို့မဟုတ် တစ်စိတ်တစ်ဒေသကို ပေါင်နှံ၍ သော်လည်းကောင်း၊ အပေါင်ပြု၍ သော်လည်းကောင်း သို့မဟုတ် အစုရှယ်ယာများအတွက် ငွေများ တောင်းခံခေါ်ယူ၍ သော်လည်းကောင်း ခွင့်ပြုရန် သို့မဟုတ် သင့်လျော်သည့်အတိုင်း ဆောင်ရွက်ရန်။
 - (၅) မန်နေဂျာများ၊ အတွင်းရေးမှူးများ၊ အရာရှိများ၊ စာရေးများ၊ ကိုယ်စားလှယ်များနှင့်ဝန်ထမ်းများကို အမြဲတမ်း၊ ယာယီ သို့မဟုတ် အထူးကိစ္စရပ်များအတွက် ခန့်ထားခြင်း၊ ရပ်စဲခြင်း၊ ဆိုင်းငံ့ခြင်းများအတွက် လည်းကောင်း၊ အဆိုပါ ပုဂ္ဂိုလ်တို့၏ တာဝန်များ၊ အာဏာများ၊ လစာဒွေများ၊ အခြားဒွေကြေးများကို သတ်မှတ်ရာ၌ လည်းကောင်း၊ အာမခံပစ္စည်းများ တောင်းခံရာ၌ လည်းကောင်း ဘင့်လျော်ဘလို ဆောင်ရွက်ရန်၊ တို့အပြင် အဆိုပါ ကိစ္စရပ်များအတွက် ကုမ္ပဏီ၏ မည်သည့် အရာရှိကိုမဆို ကိစ္စရပ် အားလုံးကို ဖြစ်စေ၊ တစ်စိဘ် တစ်ဒေသကို ဖြစ်စေ ဒါရိုက်တာများ၏ကိုယ်စား ဆောင်ရွက်နိုင်ရေးအတွက် ဘာဇန်လွှဲအပ်ရန်။
 - (၆) ဤကုမ္ပဏီ၏ ဒါရိုက်တာတစ်ဦးအား ဒါရိုက်တာရာထူးနှင့် တွဲဖက်၍ မန်နေဂျင်း ဒါရိုက်ဘာ၊ အတွေတွေ မန်နေဂျာ၊ အတွင်းရေးမှူး သို့မဟုတ် ဌာနခွဲ မန်နေဂျာအဖြစ် ခန့်ထားရန်။
 - (၇) မည်သည့် အစုရှင်ထံမှမဆို ၄ငုံးတို့၏ အစုရှယ်ယာများ အားလုံးကို ဖြစ်စေ၊ အချို့အငက်ကို ဖြစ်စေ စွန့်လွှတ်ခြင်းအား သဘောတူညီသော စည်းကမ်းများဖြင့် လက်ခံရန်။

- (၈) ဤကုမ္ပဏီက ပိုင်ဆိုင်သော သို့မဟုတ် ပိုင်ဆိုင်ခွင့်ရှိသော သို့မဟုတ် အခြားအကြောင်းများကြောင့်ဖြစ်သော မည်သည့် ပစ္စည်းကိုမဆို ကုမ္ပဏီ၏ကိုယ်စား လက်ခံထိန်းသိမ်းထားရန်အတွက် မည်သည့်ပုဂ္ဂိုလ် သို့မဟုတ် ပုဂ္ဂိုလ်များကိုမဆို ခန့်ထားရန်နှင့် အဆိုပါ ယုံမှတ် အပ်နှံခြင်းများနှင့် ပတ်သက်၍ လိုအပ်သော စာချုပ် သော င်းများ ရွှော်ကို ကြကုပ်ရန်။
- (၉) ဤကုမ္ပဏီ၏ အရေးအရာများနှင့် စပ်လျဉ်း၍ ဤကုမ္ပဏီက ပြုလုပ်သော သို့မဟုတ် ဤကုမ္ပဏီအပေါ် သို့မဟုတ် ဤကုမ္ပဏီ၏ အရာရှိများအပေါ် ပြုလုပ်သော တရားဥပဒေအရ စွဲဆို ဆောင်ရွက်မှုများကို တရားစွဲဆို၊ အရေးယူ၊ ခုခံကာကွယ်ရန် သို့မဟုတ် ခွင့်လွှတ်ရန်၊ ထိုအပြင် ဤကုမ္ပဏီက ရရန်ရှိသော ကြွေးမြီများနှင့် ဤကုမ္ပဏီအပေါ် တောင်းခံသော ကြွေးမြီများနှင့် ပတ်သက်၍ ပေးဆပ်ရန် အချိန်ကာလ ရွှေ့ဆိုင်းခွင့်ပြုခြင်း သို့မဟုတ် နှစ်ဦးနှစ်ဖက် သဘောတူ ကျေအေးခြင်းများ ပြုလုပ်ရန်။
- (၁၀) ဤကုမ္ပဏီက ပေးရန်ရှိသော သို့မဟုတ် ရရန်ရှိသော ငွေတောင်းခံခြင်းများကို ဖြန်ဖြေရေး စုံသမာဓိထံသို့ ဖြေရှင်းရန်အတွက် အပ်နှံရန်အပြင် ဖြန်ဖြေရေး ခုံသမာဓိ၏ ဆုံးဖြတ်ချက်အတိုင်း လိုက်နာဆောင်ရွက်ရန်။
- (၁၁) ဤကုမ္ပဏီက ရရန်ရှိသော တောင်းဆိုချက်၊ တောင်းခံချက်များနှင့် ကုမ္ပဏီသို့ ပေးရန်ရှိသော ငွေကြေးများအတွက် ပြေစာများ ပြုလုပ် ထုတ်ပေးခြင်း၊ လျှော်ပစ်ခြင်းနှင့် အခြားသောနည်းဖြင့် စွန့်လွှတ်ခြင်းများကို ပြုလုပ်ရန်။
- (၁၂) လူနွဲစာရင်းခံရခြင်း၊ ကြွေးမြီ မဆပ်နိုင်ခြင်း ကိစ္စများနှင့် ပတ်သက်၍ ကုမ္ပဏီ၏ကိုယ်စား ဆောင်ရွက်ရန်။
- (၁၃) ငွေလွှဲစာတမ်းများ၊ ချက်လက်မှတ်များ၊ ဝန်ခံကတိစာချုပ်များ၊ ထပ်ဆင့် လက်မှတ်ရေးထိုးခြင်းများ၊လျှော်ပစ် ခြင်းများ၊ ကန်ထရိုက် စာချုပ်များနှင့် စာရွက်စာတမ်းများကို ကုမ္ပဏီ၏ကိုယ်စား မည်သူက လက်မှတ်ရေးထိုးခွင့် ချိသည်ကို စိစစ်သတ်မှတ်ရန်။
- (၁၄) ဒါရိုက်တာများက သင့်လျော်သည်ဟု ယူဆပါက သင့်လျှော် လျှောက်ပတ်သောနည်းလမ်းများဖြင့် လတ်တလော အသုံးပြုရန် မလိုသေးသော ကုမ္ပင်္ဘာပိုင် ဂွေများကို အာမခံပစ္စည်း ပါသည်ဖြစ်ရေ၊ မပါသည်ဖြစ်စေ၊ ရင်းနှီးမြှုပ်နှံ ထားရန်နှင့် စီမံခန့်ခွဲထားရန်။ ထိုပြင် အချိန်ကာလယားလျော်စွာ မြှုပ်နံ့ထားသောငွေကို ပြန်လည်ရယူရန်နှင့် ပြင်ဆင်ပြောင်းလွဲရန်။
- (၁၅) ဤကုမ္ပဏီ၏ အက်ျိုးအတွက် ငွေကြေး စိုက်ထုတ် ကုန်ကျစံထားသေး ဒါရိုက်ဘာ သို့မဟုတ် အခြား မှုနိုလ်များက ကုမ္ပဏီ၏ (လက်ရှိနှင့် ရေဝင်တွင်ရှိခြေ၌) ပင္စည်းများမင်္ဂ ဤကုမ္ပဏီ၏ အည်ေခြန်ဖြင်ရေ ဤကုမ္ပဏီ၏ ကိုယ်စားဖြစ်စေ ပေါင်နှံခြင်းကို သင့်လျော်သည်ဟု ဟူစာပါက ဆောင်ရွက်ခွင့်ပြုံရန်။ အဆိုပါ ပေါင်နှံခြင်းဆိုရာ၌ ရောင်းချနိုင်သည့် အာဏာနှင့် အခြားသော သဘောတူညီထားသည့် တရားဝင် သဘောတူညီချက်များနှင့် ဥပဒေပြဋ္ဌာန်းချက်များပါ ပါဝင်သည်။
- (၁၆) ဤကုမ္ပဏီက ခန့်အမ်ထားသော မည်သည့်အရာရှိသို့မဟုတ် ပုဂ္ဂိုလ်ကိုမရာိ အတိအကျ ဆောင်ရွက်ခဲ့သည့်လုပ်ငန်း သို့မဟုတ် ဆောင်ရွက်မှုတစ်ခုအတွက် ရရှိသော အမြတ်ငွေမှ ကော်ရှေင်ပေးခြင်း သို့မဟုတ် ကုမ္ပဏီ၏ အဘွေ့ကွေ အမြတ်အစွန်းမှ ရွှဲဝေပေးခြင်းများ ပြုလုပ်ရန်နှင့် အဆိုပါ ကော်မရှင်များ၊ အမြတ်များခွဲဝေပေးခြင်း ဝသည်တို့ကို ဤကုမ္ပဏီ၏ လုပ်ငန်းကုန်ကျစရိတ် တစ်စိတ်တစ်ဒေသအဖြစ် သတ်မှတ်ရန်။
- (၁၇) ဤကုမ္ပဏီ၏ လုပ်ငန်းများ၊ အရာရှိများ ဝန်ထမ်းများနှင့် အစုရှင်များအတွက် ထုတ်ပြန်ထားသော စည်းမျဉ်း များ၊ စည်းကမ်းချက်များ၊ စည်းကမ်းဥပဒေများကို အခါအားလျော်စွာ သတ်မှတ်ခြင်း၊ ပြင်ဆင်ခြင်း၊ ဖြည့်စွက်ခြင်းများ ဆောင်ရွက်ရန်။
- (၁၈) ဤကုမ္ပဏီ၏ လုပ်ငန်းအတွက် ဤကုမ္ပဏီ၏ အမည်ဖြင့်ဖြစ်စေ၊ ဤကုမ္ပဏီ၏ ကိုယ်စားဖြစ်စေ လိုအပ်သည်ဟု ဟူဆလျှင် ညှိနှိုင်းခွေးနွေးခြင်းနှင့် ကန်ထရိုက်စာချုပ် ချုပ်ဆိုခြင်းများကို ပြုလုပ်ရန်၊ ဖျက်သိမ်းရန်နှင့် ပြင်ဆင်ရန် အပြင် အဆိုပါ ဆောင်ရွက်ချက် စာချုပ်များနှင့် ကိစ္စရပ်များကို လည်းကောင်း၊ ၄င်းတို့နှင့် စပ်လျဉ်းသော ကိစ္စရပ်များကို လည်းကောင်း လုပ်ကိုင်ဆောင်ရွက်ရန်။
- (၁၉) ဒါရိုက်တာများက သင့်လျော်လျှောက်ပတ်သည်ဟု မူဆမါက ကုမ္ပဏီ၏ စီးပွားရေးလုပ်ငန်းတွင် အက်ိုး ရှိစေရန်အတွက် မည်သည့် ပြည်တွင်းပြည်ပ ပုဂ္ဂိုလ်၊ စီးပွားရေး အဖွဲ့အစည်း၊ ကုမ္ပဏီ သို့မဟုတ် ဘဏ် သို့မဟုတ် ငွေကြေးအဖွဲ့အစည်းထဲမှ မဆို ငွေဈေးယူရန်။

အတွေစေမွ အချော်၊ အခောကြီးများ

ာဌ။

į

ကုမ္ပဏီကိုဥပန္နာအေရ မွဲးစည်းကည်ထောင်ပြီးသည့်ရှေမှ တစ်ဆယ့်ရှစ်လအတွင်း အကွေအွေသင်းလုံးကျွတ် အငည်း အဝေးကြီးကိုကျင်းပရမည်။ ထို့နောက် ဒါရိုက်လာအဖွဲ့က သတ်မှုလ်ပေးသည့် အချိန်နှင့် နေရာများတွင် ပြက္ခဒ်နံနှင့် တစ်နှစ်လျှင် အနည်းဆုံးတစ်ကြွင် (နောက်ထုံးကျှင်၊ သည့် အငွေးတွေအငည်းနေပေးကြီးနှင့် ဘင်ငံငံနှင့်ပါးသင်္ ဗပိုသည့်အချိန်၌) ကျင်းပရမည်။ သင်းလုံးကျွတ် အစည်းအဝေးစတင်၍ လုပ်ငန်းအတွက် ဆွေးနွေးချိန်တွင် အငည်း အဝေးအတမြောက်ရန် သတ်မှတ်သည့် အစုရှင်အရေအတွက် မတက်ရောက်သော မည်သည့်သင်းလုံးကျွတ် အစည်း အဝေးတွင်မဆို လုပ်ငန်းနှင့် ပတ်သက်၍ ဆုံးဖြတ်ဆောင်ရွက်ခြင်းမပြုေ။ ဤတွင်အခြားနည်း သတ်မှတ်ပြဋ္ဌာန်းခြင်း ဧရိုလျှင် ထုတ်စေထားသည့် မေ့ကည် ရင်းနှံးရွေ အစုရှယ်ယာများ၏ ငါးဆယ်ရာခိုင်နှန်းတက်နေည်း ပိုင်ဆိုင်ကြ သည့် (နှစ်ဦးထက်မနည်းသော) အစုရှင်များ ကိုယ်တိုင်တက်ရောက်လျှင် လုပ်ငန်းကိစ္စအားလုံး ဆောင်ရုက်ရန် အတွက် အသွေးအတခြောက်သည့်ဦးရေ ဖြစ်သည်။ အကယ်၍ ကုမ္ပဏီတွင်အစုရှင်အရေအတွက် နှစ်ဦးတည္း သရိုသည့် ကိစ္စတွင်အစာအတခြောက်သည့်ဦးရေ ဖြစ်သည်။ အကယ်၍ ကုမ္ပဏီတွင်အစုရှင်အရေအတွက် နှစ်ဦးတည်း သရိုသည့် ကိစ္စတွင်မှု ထိုနှစ်ဦးတည်းသည့်ပင်လျှင် အစည်းအဝေး အသမြောက်ရန် သတ်မှတ်သည့် အချောကျွေး ဖြစ်တရမည်။

အမြိုဘ် စေစု များ

ဗ၆။ – သင်းလုံးကျွတ်အည်ေးအရေးတွင် ဤကုမ္ပဏီ၏ အစုရှင်များအား ခွဲဝေပေးမည့် အမြတ်စေစုကို ကြေညာရမည်။ သို့ ျာတွင် အမြတ်စေစုသည် ဒါရိုက်တာများက စတာကိခံသော ငွေပမာဏထက် မကျော်လျှန်စေရ။ သက်ဆိုင်ရာ နှင့်၏ အမြွတ်စစေအာ သို့သောက် အခြားမခွဲစေရသေးသည် အမြတ်ပမာဏမှအပ အမြတ်စေစုကို ရွဲစေမပေးရ။

ုံးဝန်တမ်းများ

ကုေ ႏွန္မက်သည့္ ႏွမံခန္မာရုံးစာစိန္ကရဲ့ ႏုံးႏွစ်၍ စောဝင်ရွက်မည်မြစ်ပြီး အရည်အရင်း ပြည့်ခံသူမှုရှိုက်တစ်ဦးအား အားကွားနွာရင့်မႈနှာအမြင်းများစိုးရုံးနှင့် အခြားအရည်အမျင်း ပြည့်မီသူများအား ရုံးဝန်းကမ်းများအဖြင့် မန့်အစ်သော် မြင်သည်။ ကမ္ဘား ၏ကျွောက်မကိုတ်နှင့် စာခြားအသုံးစရိတ်များကိုသို့သော ညက်မှုစော်မျေားနှင့် အကော်ကြီးများ များကို မင်းရိုက်သားနေျင်းကမ်းကိုတ်နှင့် စာခြားအသုံးစရိတ်များကိုသို့သော ညက်မှုစော်မျေားနှင့် အကော်ကြီးများ ဘည်မြေရင်းသားနေရိုးလွေးသည့် ကိုလ်မည်ဖြစ်ပြီး ခွင်းသက်မှုတ်ရောမ်များကို သင်းကုံးတျက် အားညီမသားက ဘည်မြေရင်းမည်ကြားသွေးသွေးရာများမည် လုပ်စန်းရုံး၏ ထိရောက်များကို လည်းကုံးစည်းအားလုံးအတွက် အာဘန်းရှိစေရမည်ဖြစ်ပြီး မန်နေကျင်း ဒေရိုက်စာအားဟာစန်ခံ၍ ဆောင်ရွက်ရမည်း၊

မင္မစၥရင်းရမ်ား

- က ခြင့်ကြိုက်ကုန်ခွင်းသည်။ သင့်ခော့ခြံသည့်၊ ခွေစာရင်းစာအုပ်များကို၊ ဘောက်ဖော်ပြပါ၊ သင်္ကမှတ်ဖျက်များနှင့်အည်။ အားတိုတိုင်းငင်မှန်း စောင်ငွက်မှေးညို။
 - (၈) တုမ္ပဏီ၏ ရင္မွေ၊ သုံးႏွေများ၏ ပမာဏနှင့် ၄င်းရင္မေ၊ သုံးငွေများ ဖြစ်ပေါ်ခြင်းမှ ဂ် စပ်လျဉ်းသည့် အကြောင် ကိစ္စချသ။
 - (၂) ကုမ္ပဏီ၏ ဘုန်ခဖူည်းများ ကောင်းရခြင်းနှင့် ဂယ်ထုခြင်းများမ
 - (၃) ဤကုမ္ပဏီ၏ ဂရန်ပိုင်ခွင့်နှင့် ပေးရန်တာဝန်များ။
- ၁၉။ ငွေစာရင်းစာအုပ်အားလုံးကို ဤကုန္ပဏီ၏ မှတ်ပုံတင်ထားသော လု၆ငန်းရုံး သို့ပော့တံ ဒါရိုက်တာများက သင့်ရေးချိ သည်ဟု တင်မြင်ယူဆသော အခြားနေရာတွင် သိမ်းဆည်းထားရမည်ဖြစ်ခြား ရုံးချိန်က တွင်း၌ ဒါနိုက်ကာများက စစ်ဆေးနိုင်ရန် ပြသထားရမည်။

စာရင်းနေ

ျား ။ စာရင်းစစ်များကို မြောဆိုဆင်ကျမည်။ ၇၀ိ၈၈၀ရစ်စာခြားစစ်များ၏ တာဝန်းလည်းမြို့မြောန်းငံ ကျနောင်များ၊ မလိဂ္ဂျား မြောနစ်များစုံ အခါအားလျော်မွာ ပြစ်ဆင်သက်မှတ်သည့် စည်းမျှင်။ စည်းလည်းစည်း ကို ကံလျောည်တွေ ဖြစ်ရမည်

နို့ တစ်စၥ

၂၁။ ဤကုမ္ပဏီသည် မည်သည့်အစုရှင်ထံသို့မဆို နို့တစ်စာကို လက်ရောက်ပေးအပ်ခြင်း သို့မဟုတ် နို့တစ်စာပါသော စာကို စာတိုက်ခ ကြိုတင်ပေးထား၍ ၄င်းအစုရှင်ထံ မှတ်ပုံတင်လိပ်စာအတိုင်း စာတိုက်မှတစ်ဆင့် လိပ်မူ ပေးဝို့ခြင်းအားဖြင့် ပေးစို့နိုင်သည်။

တံဆိပ်

၂၂။ ၁ါရိုက်တာများသည် တံဆိပ်ကို လုံခြုံစွာထိန်းသိမ်းထားရန်အတွက် စီမံဆောင်ရွက်ရမည်။ ထိုတဲဆိပ်ကို ဒါရိုက်ဘာ များကကြိုတင်ပေးအပ်ထားသည့် ခွင့်ပြုစျက်ဖြင့်မှတစ်ပါး၊ ထိုအပြင် အနည်းဆုံး ဒါရိုက်တာတစ်ဦး ရှေ့မှောက်တွင်မှ စာစ်ပါး မည်သည့်အခါမျှ မသုံးရ။ တံဆိပ်ရိုက်နှိပ်ထားသည့် စာရွက်တတမ်းတိုင်းတွင် ကိုဒါရိုက်တာက လက်မှတ်ရေးထိုးရမည်။

လျော်ကြေး

- JSII
- မြန်မာနိုင်ငံကုမ္ပဏီများ အက်ဥပဒေ ပုဒ်မ ၈၆ (ဂ) တွင် ဖော်ပြပါရှိသည့် ဖြဌာန်းချက်များ၊ လက်ရှိတရားငေ တည်ဆဲဥပဒေပြဌာန်းချက်များနှင့် မဆန့်ကျင်စေဘဲ ကုမ္ပဏီ၏ ဒါရိုက်တာ၊ စာဂျင်းစစ်၊ အတွင်းရေးမျုံး သို့မဟုတ် အခြားအရာရှိ တစ်ဦးဦးမှာ မိမိ၏ တာဝန် ဝတ္တရားများကို ဆောင်ရွက်ရာ၌ဖြစ်စေ၊ ထိုတာစန် ပတ္တရားများနှင့် စပ်လျဉ်း၍ဖြစ်စေ ကျခံခဲ့ရသည့်စရိတ်များ၊ တောင်းခံဝွေများ၊ ဆုံးရှုံးငွေများ၊ ကုန့်ကျားငွေများနှင့် ကြွေးမြီတာဝန်များ အတွက် ကုမ္ပဏီတံမှ လျှော်ကြား ရထိုက်ခွင့်ရှိစေရမည်။

ဖျက် ၁၆ န်းခြင်း

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ကုမ္ပဏီ၏ အတွေတွေအစည်းအဝေး ဆုံးဖြတ်ရက်ဖြင့် ကုန္ပဏီအား ဖျက်သိန်းနိုင်သည်။ ယင်းသို့ ဖျက်သိန်းရာ တွင် မြန်မာနိုင်ငံးခုမ္ပဏီများ အက်ဥပဒေများနှင့် ယင်းဥပဒေများအား အခါထားလျော်စွာ (ဂြံဆင်ဖြောင်းလတားသည့် တရားဥပဒေများတွင် ပါပင်သည့် စည်းမျဉ်းများအတိုင်း လိုက်နာပြုလုပ်ရည်။

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အောက်တွင် အမည်၊ နိုင်ငံသား၊ နေရပ်နှင့် အကြောင်းအရာ စုံလင်စွာပါသော ဧယားတွင် လက်မှတ်ရေးထုံးသူ ကျွန်ုပ်တို့ ကိုယ်စီကိုယ်၄သည် ဤသင်းဖွဲ့စည်းမျဉ်းအရ ကုမ္ပဏီတစ်ခုဖွဲ့စည်းရန် လိုလားသည့်အလျောက် ကျွန်ုပ်တို့၏ အမည်အသီးသီးနှင့် ယှဉ်တွဲ၍ ပြထားသော အစုရှယ်ယာများကို ကုမ္ပဏီ၏ မတည်ရင်းနှီးငွေတွင် ထည့်စင်ရယူကြရန် သဘောတူကြပါသည်။

စဉ်	အစုထည့်ဝင်သူများ၏ အမည်၊ နေရပ်လိပ်စာနှင့် အလုပ်အကိုင်	နိုင်ငံသားနှင့် အမျိုးသား မှတ်ပုံတင်အမှတ်	ဝယ်ယူသော အစုရှယ်ယာ ဦးရေ	ထိုးမြဲလက်မှတ်
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အထက်ပါ လက်မှတ်ရှင်များသည် ကျွန်ုပ်၏ ရှေ့ရောက်လွင် လက်မှမာ်ရေးတို၊ကြပါသည်။

THE MYANMAR COMPANIES ACT

PRIVATE COMPANY LIMITED BY SHARES

Alemorandum Of Association

OF

INTER CERTER & REPORTS COMPANY LIMITED

 $\langle \phi \rangle \langle \phi$

- I. The name of the Company is the Will Mult Clive House COMPANY LEMITED.
- II. The registered office of the Computy will be shuated in the Union of Hyperner.
- III. The objects for which the Compacy is established are as on the next page.
- IV. The liability of the members is limited.
- M. The authorised capital of the Company is Ks. 1000, CCO₃CCO₃CCO₄CCO

- (1) To carry on the trading business of importers, exporters, wholesalers and retailers of the following commodities and products permitted by the Government, solely on its own or in join-venture with any toreign or local partners.
 - (a) Agricultural and farm produces.
 - (b) Forest products and value-added wood-based products.
 - (c) Animal by-products and Animal feed.
 - (d) Marine products.

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- (e) Fertilizer and insecticides.
- (f) Chemicals and dyes.
- (g) Factory utencils and raw material
- (h) Household goods.
- (i) Personal goods.
- (j) Construction materials and paints.
- (I;) Electrical and electronic products.
- (1) Vehicles, Machinery and spares.
- (m) Tools and implement.
- (n) Medicines and medical equipment.
- (o) Foodstuff and general merchandise.
- (p) Textile and garment.
- (q) Paper, stationery and photographic stores.
- (r) Office equipment and educational supplies.
- (2) To borrow money for the benefit of the Company's business from any person, firm, company, bank or financial organization in the manners that the Company shall think fit.
- PROVISO: Provided that the Company shall not exercise any of the above objects whether in the Union of Myanmar or elsewhere, save in so far as it may be entitled so as to do in accordance with the Laws, Orders and Notifications in force from time to time and then only subject to such permission and or approval as may be prescribed by the Laws, Orders and Notifications of the Union of Myanmar for the time being in force.

We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

⊂ _y No:	Name. Address and Occupation of Subscribers	Nationality & N. R. C. No.	Number of shares taken	Signatures	
ł.	U AUNG HEATER GO TO.4420-2424, The Mingalar Obrect, 46/4 Verd, Thispangyur Pownship, Yangon. (Merchant)	Nyansar 12/12Naffe Doob - PCI toool	Comment	J. Main	X.
<u>.</u> .	DAW NHIN NWE AAR TUN Ho.1120-1121, Thu hingalar Ammset, 1074 Mard, Thingungyun Downship, Yatson. Metrikan.	Nyannar 13/XeOcNe (Asing)002658		A we	
3.					
Yangon	. Dated the 20th	day oî	· .	. 19. 1 .	

It is hereby certified that the persons mentioned above put their signatures in my presence.

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THE MYANNAR COMPANIES ACT PRIVATE COMPANY LIMITED BY SHARES Articles OF Association

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FILTER CHEMICAL & MACHINERY COMPANY LIMITED

the stand of the stand of the

1. The regulations contained in Table 'A' in the First Schedule to the Myanmar Companies Act shall apply to the Company save in so far as such regulations which are inconsistent with the following Articles. The compulsory regulations stipulated in Section 17 (2) of the Myanmar Companies Act shall always be deemed to apply to the Company.

PRIVATE COMPANY

- 2. The Company is to be a Edwate Company and accordingly following provisions shall have office:-
 - (o) The number of numbers of the Company, exclusive of persectawho are in the employment of the Company, shall be limited to fifty.
 - *(b)* Any invention to the public to subscribe for any share or debendire or the bendire product of the Company is hereby prohibited.

CAPITAL AND SHARES

- 3. The Authorised Capital of the Company is Ks. 1000,000,000% (Kyate One thoreand million Only) divided into(100000) shares of K. 10,000 /- (Kyate Ten thousand Only) each, with power in General Ideeting either to increase, reduce of alter such capital from time to time in accordance with the regulations of the Company and the legislative provisions for the time being in force in this behalf.
- 4. Subject to the provisions of the Myanmar Companies Act the shares shall be under the control of the Directors, who may allot or otherwise dispose of the same to such persons and on such terms and conditions as they may determine.

- The certificate of title to share shall be issued under the Seal of the Company, and signed by the General Manager or some other provides nominated by the Hoard of Directors. If the share certificate is defaced, for an deproyed, it may be renewed for payment of such lee, if any, and on such terms, if any, as to evidence and indemnity as the Directors may think fit. The legal representative of a deceased manufact shall be a required by the Directory.
- 5. 6 The Directors may from time to time make call upon the members in respect of any money unpaid on their shares, and each member shall be liable to pay the ataouar of every call so made upon him to the persons, and at the times and places appointed by the Directors. A call may be made payable by instalments or may be revoked or postponed as the Directors may determine

DIRECTORS

Unless otherwise determined by a General Meeting the number of Directors shall not be less than (Ξ) and not more than (\Im).

The First Directors shall be:-

- THE AUNG HELLING OO
- (2) DAN MENIH AWE IMA SUD
- $\left\{ \hat{\boldsymbol{\omega}} \right\}$

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- e de la co
- (†)
- 5. The Directors and from time to time appoint the of their body to the office of the Managing Director for such terms and at such remaneration as they think fit and he shall have all the powers delegated to him by the Board of Directors from time to time.
- F. The qualification of a Director shall be the holding or at least (300) shares in the Company in his or her own many and it shall be his duty to comply with the provision of Section (85) of the Myamua Companies Act.
- 10. The Board of Directors may in their absolute and inductioned discretion refuse to register any proposed transfer of shares without assigning only reason.

PROCEEDINGS OF DIRECTORS

- 11. The Director may meet together for the despatch of business, adjourn and otherwise regulate their meeting as they thick fit and determine the quorum necessary for the transaction of business. Unless otherwise determined, two shall form a quorum. If any question arising at any meeting the Managing Director's decision shall be final. When any matter is put to a vote and if there shall be an equality of acts the Chaiman shall be a second or casify that
- 12. Any Director may at any time currence is meeting of Elivertors.

13. A resolution in writing signed by all the Directors shall be as effective for all purposes as a resolution passed out at meeting to the Directors, duly called, held and constituted.

POWERS AND DUTIES OF DIRECTORS

- 14. Without prejudice to the general power conferred by Regulation 71 of the Table "A" of the Myanmar Companies Act, it is hereby expressly declared that the Directors shall have the following powers, that is to say power:---
 - (1) To purchase or otherwise acquire for the Company any property, rights or privileges which the Company is authorized to acquire at such price, and generally on such terms and conditions as they think fit; also to sell, lease, abandon or otherwise deal with any property, rights or privileges to which the Company may be entitled, on such terms and conditions as they may think fit.
 - (2) To raise, borrow or secure the payment of such sum or sums in such manner and upon such terms and conditions in all respects as they think fit and in particular by the issue of debentures or debenture stocks of the Company charged upon all or any part of the property of the Company (both present and future) including its uncalled capital for the time being.
 - (3) At their discretion, to pay for any rights acquired or services rendered to the Company, either wholly or partially in cash or shares, bondt, debenures or other securities of the Company and any such shares may be issued either as fully paid up or with such amount credited as paid up thereon as may be agreed upon; and any such bonds, debentures or other securities may be either specifically charged upon all or any part or inc patient, or me company and its uncalled capital or not so charged.
 - (4) To secure the fulfilment of any contracts or engagement entered into by the Company by mortgage or charge upon all or any of the property of the Company and its uncalled capital for the time being or by granting calls on shares or in such manner as they may think fit.
 - (5) To appoint at their discretion, remove or suspend such Managers, Secretaries, Officers, Clerks, Agents and Servants for permanent, temporary or special services as they may from time to time think fit and to determine their duties and powers and fix their salaries or emoluments and to require security in such instances in such amount as they think fit and to depute any officers of the Company to do all or any of these things on their behalf.
 - (6) To appoint a Director as Managing Director, General Manager, Secretary or Department Manager in conjunction with his Directorship of the Company.
 - (7) To accept from any member on such terms and conditions as shall be agreed on the surrender of his shares or any part thereof.

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- (5) To appoint any percent or persons to accept and hold in trust for the Company any property belonging to the Company or in which it is interested or for any other purposes and to execute and do all such deeds and things as may be requisite in relation to any such trust.
- (9) To institute, conduct, defend or abandon any legal proceedings by or egainst the Company or its officers or otherwise concerning the affairs of the Company and also to compound and allow time for payment or satisfaction of any debts due to or of any claims and demands by or against the Company.
- (10) To refer claims and demands by or against the Company to arbitration and to observe and perform the awards.
- (11) To make and give receipts, releases and other discharges for money payable to the Company and for the claims and demands of the Company.
- (12) To act on behalf of the Company in all matters relating to bankruptcy and insolvency.
- (13) To determine who shall be entitled to sign bills of exchange, cheques, promissory notes, receipts, endorsements, releases, contracts and documents for or on behalf of the Company.
- (14) To invest, place on deposit and otherwise deal with any of the manays of the Company not immediately required for the purpose thereof, upon securities or without securities and in such manners as the Directors may think fit, and from time to time vary or realize such investments.
- (15) To execute in the name and on behalf of the Company in favour of any Director or other person who may incur or be about to incur any personal liability for the benefit of the Company, such mortgages of the Company's property (present and future) as they think fit and any such mortgage may contain a power of sale and such other powers, covenants and provisions at shall be agreed on.
- (16) To give any officer or other person employed by the Company a commission on the profits of any particular business or transaction or a share in the general profit of the Company and such commission or share of profit shall be treated as part of the working expenses of the Company.
- (17) From time to time, to make, vary and repeal bye-laws, for the regulation of the business of the Company, the officers and servants or the members of the Company or any section thereof.
- (18) To enter into all such negotiations and contracts and rescind and wary all such contracts and execute and do all such acts, deeds and things in the name and on behalf of the Company as they may consider expedient for or in relation to any of the matter aforesaid or otherwise for the purposes of the Company.
- (19) To borrow money for the benefit of the Company's business from any personfirm or company or bank or finacial organisation of local and abroad in the manner that the Directory shell think fit.

GENERAL MEETINGS

15. A general meeting shall be held within eighteen months from the date of its incorporation and thereafter at least once in every calendar year at such time (not being more than fifteen months after the holding of the last preceding general meeting) and places as may be fixed by the Board of Directors. No business shall be transacted at any general meeting unless a quorum of members is presented at the time when the meeting proceeds to business, save as herein otherwise provided Member holding not less than 50 percent of the issued shares capital (not less than two members) personally present, shall form a quorum for all purposes. And if and when in the case of there are only two number of members in the Company, those two members shall form a quorum.

DIVIDENDS

16. The Company in general meeting may declare a dividend to be paid to the members, but no dividend shall exceed the amount recommended by the Directors. No dividends shall be paid otherwise than out of the profits of the year or any other undistributed profits.

OFFICE STAFF

17 The Company shall maintain as office establishment and appoint a qualified person as General Manager and other qualified persons as office staffs. The remuneration and allowances such as salaries, travelling allowances and other expenditures incidental to the business shall be determined by the Board of Directors, and approved by me general meeting. The General Manager shall be responsible for the efficient operation of the office in every respect and shall be held accountable at all times to the Managing Director.

ACCOUNTS

- The Directors shall cause to be kept proper books of account with respect to: (1) all sums of money received and expended by the Company and
 - (1) the matters in respect of which the receipts and expenditures take place;
 - (2) all sales and purchases of goods by the Company;
 - (3) all assets and liabilities of the Company.
- 19. The books of account shall be kept at the registered office of the Company or at such other place as the Directors shall think fit and shall be opened to inspection by the Directors during office hours.

AUDIT

20. Auditors shall be appointed and their duties regulated in accordance with duprovisions of the Myanmai Companies Act or any, statutory modifications thereas for the time being in force.

NOTICE

21. A notice may be given by the Company to any member either personally or sending it by post in a prepaid letter addressed to his registered address.

THE SEAL

22. The Directors shall provide for the safe custody of the Seal, and the Seal shall never be used except by the authority of the Directors previously given, and in the presence of one Director at least, who shall sign every instrument to which the Seal is affixed.

INDEMNIEV

23. Subject to the provisions of Section 86 (C) of the Myaumar Companies Act and the existing laws, every Director, Auditor, Secretary or other officers of the Company shall be entitled to be indemnified by the Company against all costs, charges, losses, expenses and liabilities incurred by him in the execution and discharge of the duties or in relation thereto.

WINDING-OF

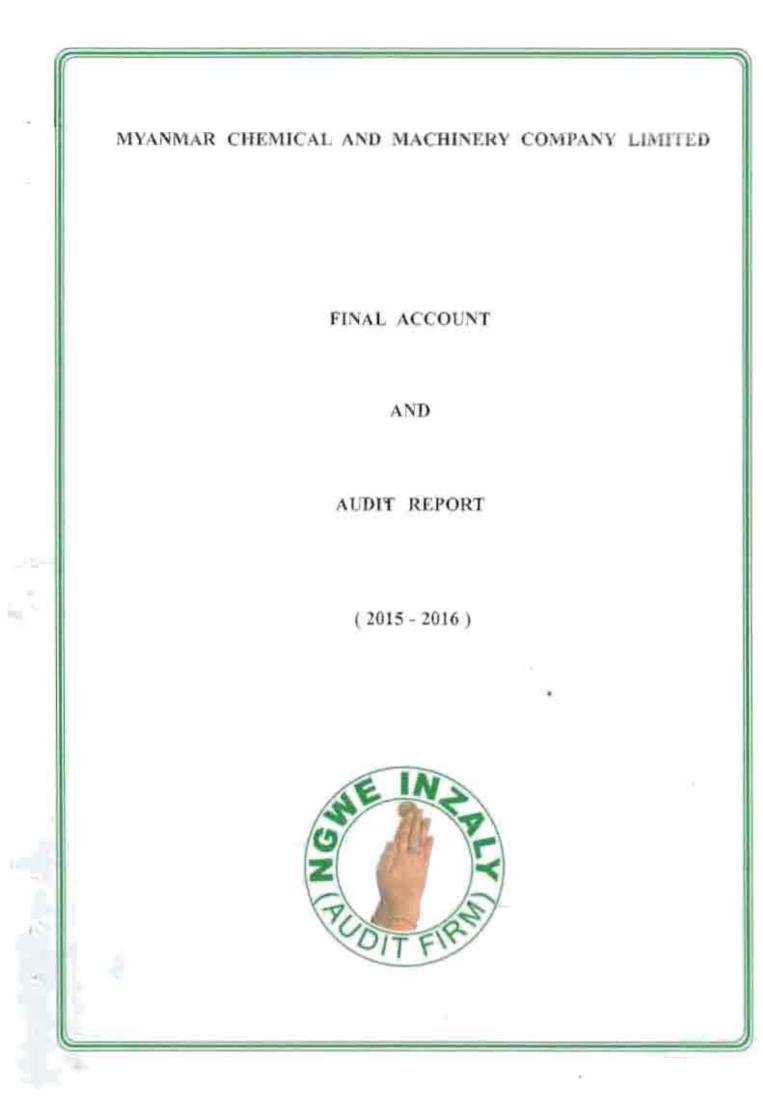
24 Subject to the provisions contained in the Myanmar Companies Act and the statutory modification thereupon, the Company may be wound up voluntarily by the resolution of General Meeting.

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We, the several persons, whose names, nationalities, addresses and descriptions are subscribed below, are desirous of being formed into a Company in pursuance of this Articles of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Sr No:	Name, Address and Occupation of Subscribers	Nationality & N. R. C. No.	Number of shares taken	Signatures
1.	U AUNG ELAING CO No.1120-1121,Thu Lirgeler Street,17/4 Ward,Thingungyun Township,Yangon. (Merchant)	Nyanmar 12/LahaTa (Naing)025897		Had in
2.	DAW HEIN WWE DAE TUN No. 1720-1424, flut Fingeles Street, 16/4 Ward, Thingungsun Courship, Fanges. (Lerchart)	Nyannap 457551affa (Maina)002655		× we
3.				
angor	n. Dated the 24th	day of Lia	ار ج: ج:	

It is hereby certified that the persons mentioned above put their signatures in my presence.





Myanmar Chemical & Machinery Co., Ltd.

No. 1120/1121, Thumingalar Road, 16/4 Quarter, Thingangyun Tsp, Yangon, Myanmar. Tel : 95-1-562020, 562021 Fax: 95-1-577148, 562131 E-mail: mcm@myanmar.com.mm

STATEMENT OF THE DIRECTORS

We admitted that the auditing done on the submission of our data presented is right. If there is the occurence of Income-bearing business besides the said account, It is the obligations of all the share holders of the Company.

We support that the facts above mentioned are true and correct according to section 133 (1) (2) of the Myanmar Company Act.



On behalf of the Board

U Aung History Co

Managing Kinsian

and a statement of

Dow KINT IIww Mar Tutt Director Myanmar Chemical & Machinery Co., Ltd.:

25 JAN 2017

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF FINANCIAL POSITION AS AT 31,3,2016

2014-2015 Kyats		Note	2015-2016 Kyats
244.00	Assets	22222	
	Non-Current Assets		
580,646,064.90	Tangible Assets	i.	608,684,782.00
	Intangible Assets		
14,064,362.00	Deem Profit Adjustment	2	14,064,362.00
	Current Assets		
74,663,624.00	Rubber Planting	3	117,463,855.0
21,496,400.00	Inventory		
1,028,000.00	Preliminary Expenses	4	1,028,000.00
2,627,746,880.00		5	15,279,813,744.21
82,129,930.00	Receivable	6	37,960,980.00
521,942,476.00	Advance Payment	7	766,589,657.00
346,577,072.50	Cash at Bank	8	145,600,002.0
5,767,132.00	Constraint Street and a second second second	9	11,148,779.9
7,164,144,587.10	Cash in Hand	10	44,766,594.10
11,440,206,528.50	Total Assets		17,027,060,756.4
	Equity & Liabilities		
500,000,000.00	Authorized Capital	11	500,000,000.0
	(50000 shares @ 10000 Ku)		
5 100 000 00	Issued & Paid up Capital	12	5,100,000.0
	(510 Shares @ 10,000 Kz)		0501050020000
1,195,450,787.52	Retained Earning. Account	13	1,749,626,396.4
	Current Liabilities		
17.019,585 00	Provision for Commercial tax.	14	203,708,252.0
10,222,636,155.98	Payable	15	15,068,626,108.0
11,440,206,528.50	Total Equity & Liabilities		17,027,060,756.4
	Steven Juse		6
X	5	en this live \$	C. C.
		Directile.	COLCAS WH
33.600	g Haung Cic Midaurium C	Therman & Mak	THE COLUMN

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Room. 801, Tower B, 50^m Street Condominium (AMPS), 50^m Street, Between Maha Bandula Road & Merchant Road, Botantaung Township, Yangon, Myanmar. Tel : 095000752, 095119742, 0973049312 095342605, 397424, 197575 Gmail : ngweinzali@gmail.com Website : www.ngweinzalyaudit.com

AUDITOR'S REPORT

MANAGING DIRECTOR

MYANMAR CHEMICAL AND MACHINERY CO., LTD

We have audited the accompanying balance sheet of the Myanmar Chemical And Machinery Co., Ltd as of March 31, 2016 and income statement, statement of change in equity and cash flow statement for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Myanmar Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with the Section 145(1)(2) of the Myanmar Companies Act, we report that .

In our opinion,

(1) Subject to our notes to the Financial Statements, the Company's accounts and statements are properly drawn up in conformity with the provisions of the Myanmar Companies Act and Myanmar Accounting Standards so as to exhibit a true and fair view of the financial position of the Company as of March 31, 2016 and of its financial performance and its cash flows for the year then ended, according to informations and explanations given to us.

(2) Our audit has been conducted based on the books and records provided by the Company, have been maintained according to Section 130 of the Myanmar Companies Act.

AUDITOR

Date: Yangon. 25 JAN 2017



MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 - 3 - 2016

		Kyats
Revenue	Sch-J	3,763,736,043.00
Less: Operating Expenses	Sch-1.1	(3,436,741,328.06)
Gross Profit / (Loss)		326,994,714.94
Add: Exchange Gain	Sch-7	55,041,439.62
Less Depreciation for the year	Sch-5	(61,227,265.90)
Less: Administrative Expenses	Sch-6	(132,025,231.84)
Net Profit / (Loss)		188,783,656.82
Alexander Conservation Alexander Ale	5.	AW ATL THIDA
Direct Myammar Cherrical & M		Mills, BroartELO, Filter, Combrid AMPS), Malada (tead & Marching Road

			Sch-1
Revenue			Kyats
Construction Income - Myingyan		Sch-2	3,251,779,000 00
Construction Income - Caustic Soda			31,270,000.00
Import Sales		Sch-3.1	491,253,000.00
Service Income for Tender Processing	g(US\$ 120,000)		146,160,000.00
			3,920,462,000.00
Less: Provision for Commercial tax			(186,688,667.00)
		-	3,733,773,333.00
Rubber Sales		Sch-4.1	29,962,710.00
			3,763,736,043.00
			Sch-1.1
	÷		Sca-1.1
Operating Expenses	iñ.		Kyats
Costs for Construction	Sch-2.1		2,959,980,739.00
Sub Contract Expenses			25,641,400.00
mport Costs of Goods Sold	Sch-3		146,184,462.01
Expenses for Rubber Sales			
Production Expenses	Sch-4	265,409,017.69	

3,436,741,328.06

.

			Sch-2
Construction Income			Kyats
Piping Works - (မြှင်းခြံသံမဏိစကိရှိ)		Sch-2.2	3,251,779,000.00
9.4		8	<i>v</i>
	ä		Sch-2.1
Costs for Construction			
Construction			Kyats
Direct Material Expenses		6	1,514,151,490.00
Direct Labour Expenses			366,183,651.00
Sub-Con Expenses			500,000,000.00
Crane Charges			343,227,875.00
Inspection fee			183,380,000.00
Indirect Expenses			53,037,723.00
	S 4		2,959,980,739.00
	ž.		
			. ee .

Const	ruction Income, Withholding tax a	nd Commercial tax Sched	luie	Sch-2.2
Sr.	Project Name	e Contract Value (Ks) Withholding		Commercial tax
1	Piping Works - (မြင်းခြံသံမဏိစက်ရုံ)	3,251,779,000.00	65,035,580.00	154,846,619.00
		3,251,779,000.00	65,035,580.00	154,846,619.00

Withholding tax Schedule

Sch-2.3

Sr.	Project Name	Cash Received	Withholding tax	Date
;	Piping Works - (မြင်းခြံသံမတ်စက်ရုံ)	93,360,000.00	1,867,200.00	31.8.2015
2	Piping Works - (ခြင်းခြံသံမဏိစက်ရုံ)	1,806,621,000.00	36,132,420.00	29.9.2015
3	Piping Works - (မြင်းခြံသမတ်စက်ရှိ)	703,308,000.00	14,066,160.00	29.9.2015
4	Piping Works - (မြင်းခြံသံမကံစက်ရုံ)	323,312,000.00	6,466,240.00	22 2 2016
5	Piping Works - (မြင်းခြံသံမတံစက်ရှိ)	325,178,000.00	6,503,560.00	18.3.2016
		3,251,779,000.00	65,035,580.00	

Commercial tax Schedule

Sch-2.4

Sr.	Project Name	Project Income	Commercial tax	Date
ļ	nibiud Morks - (ActiBionecocoul)	3,251,779,000.00	154,846,619.00	10.3.2016
		3,251,779,000.00	154,846,619.00	

				Sch-3
Import Costs of Goods Sold				Kyats
Import Purchase		\$	63,492.16	77,333,446.01
Import Direct Expenses				
Import Duty			1,342,956.00	
Security fee			480,000.00	
Custom Clearance			9,428,060.00	
Container & Transport			48,000,000.00	
Crane Charges			9,600,000.00	
		_		68,851,016.00
				146,184,462.01
	- E			Sch-3.1
import Sales	1 ·			Kyats
Import Sales		\$	42,580.16	289,695,000.00
Import Sales		\$ \$	8,192.00	129,150,000.00
Import Sales		\$	12,720.00	72,408,000.00
	2.0		63,492.16	491,253,000.00

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Manufacturing Account for th	he year ended 31.3.2016	Sch-4
Rubber Planting Project		Kyats
Direct Labour (Tapping Charges)	20,298,824.00	
Direct Material	15,316,700.00	
Direct Expenses	900,000.00	36,515,524.00
Rubber Estate Salary	168,031,896.46	168,031,896.46
Processing Expenses		
Indirect Expenses	1,810,000.00	
Fixed Expenses	24,341,732.23	
Travelling Charges	10,000.00	
Machine Repair Charges	29,500.00	
		26,191,232,23
Depreciation for the year	-	34,670,365.00
Production Costs for (61,258 lbs)	-	265,409,017.69
:* *		Sch-4.1
Sales Income		Kyats

Rubber Sales

Sch-4.4

29,962,710.00

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Import Paretane, Sales & Advance Tax Schedule

ir.,	Date	ID-No	ID Ami(USS)	Description	Wait	Quy	Amr (US\$)	Import Sales (Ks)	Withholding tax	Commercial Line	AV VARUE	Import Dury	Comisercial Tax	Security fre	2% Tax
	1														
2	28-Dec-14	500323	13.491.56	Ra- Materials							62.129.223.00	621,292,00	3.137,526.09	220.000.00	1.242.584.00
	_			Magnetia Carbon IB	59	\$93.26	89.78					-			
4				Magnella Carbon RB	Ka	1,037.40	103,74								
1	_			Migresia Carbos RB	Ks	7.022.40	702.24								
4				Nagetsia Motor	Ka	3.000.00	100.00								
4		1		Continuing Mice	Ka	23,000.00	2,300.00						i	Sec. 20	
4				Ramming Mix	58	37,090.00	2,700.00	A							
4				Ceg Vibration Mix	R.C.	+ 15.000.00	1,509.00								
4		- 1		Turidist Spruying Monor	×.6	100.000.001	14.000.00		S						
2	14.Dec-11	193098	10,363.00	Re- Manmats		10		275,900,000.00	3,511,000,00	13,793,099.00	16,938,990.00	169,389.96	155,414,00	20,000.00	\$18,778.0
-				Capitalies \$77 -	K4	51,000.00	7,559.09								
4				Castables #42	84	2,900,00	266.00								
-	-			Casulties (Hk)	1.00	12.000.00	1,160:00								
-				Castables 1175V	Kg	1,500.00	225.00								
4				Aductiona Processi Brick	Kg	642.60	128.00								_
24.	3-Dec-15	901130	4,201,80	Par Materiala		_					11.008.716.03	116,087.80	335,940.00	10,000,00	220,174.00
4	- 11 - 1			Maganita Carbon Brick	Xg	\$78.00	\$2.80								
+				Morter	Es.	1,449.00	144.00								
-				Energing Mix	Ka	40.000.00	4,000.00								
4	24-14cm-12	156945	4,320.00	Permaniel MA 70	Kg	36,000.00	4,320.00				4,739,299.00	67,397.96	340,330,00	40,005.00	134,784,00
Ť		-	47,550.16	Total		381,111.56	47.588.16	275,960,600,00	5,518,009,00	13.795,093.60	He.116.039.00	MR. 164.90	4.549,210,04	345 (614,00	1,334,336.00

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Import Purchase, Sales & Advance Tax Schodula

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mpe,	et Purchas	ie, Sales J	6 Advance Tax	Schedule											Sch-3.2
Se.	Peis	10 80	TD ANTILLSS	Description	Unit	019	AIN (0.85)	Unpert Siles (K.s.)	Watherdong tax	Commercial Ga	AV Value	Import Date	Commercial Tax	Security for	255 T+>
1	15-00-1	197344	8.192.00	Save Manual	+					102	12.828,677.99	129.461.00	641,906.00	20.000.00	256,373
1		1.000	121	Biowide ()]=	84	250.00	_12.09	(in				100 mg			
				Polynius	152	1.58.00	130.00								
[Eliopida 11	K4	1,650.00	\$25.00	1							
				Riccide is	Kg	5,490.00	2,745.02	123.000,000.00	2,460,000.00	6,130,009.00					
1				Discide 21	Kg	6,120.00	3,060.99				2 I TRT				
		1		Biocada 25	Ka	300.000	259.00				1				
ł				Over ing Ownerd	Ke.	938.00	\$77.00	in the second second							
				Beender (7)2	Ke	909,000	200.03			<u> </u>					
t			1,192,00	Yotal	1-	15,190.00	8,792.86	123,000,000,000	2,469,000,00	6.150.000.00	12,828,672.00	1295461.00	647,996.08	28,000.00	154,5733

	1000	100.00	In a colorest	and the second second	Day of	Sec. 6	Conscilutos di	and the second second second	Tabler of Disease American	NAMES OF A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTIONO	0.000000000000	Carbook with the C	and the second se	W10042054010	0.000 million (1971)
e.	Date	ID No.	ID Ame(USS)	Description	Unit	QB	Amr (1235)	Import Sales (Ka 3	Withholding (As	Commercial tes	AV Value	Import Dury	Commercial Ist	Security fee	1% Tax
i.	27-Eluc-15	901.)49	2,660,00	Rev Millional	+						-				
_				Permater MA 75	Xg	20,000,00	2,405.99	1			\$255,000.00	62,850.00	317,544.00	29,000.00	125,769.00
2	33-Jui-15	112346		Rew For Industry			_								
4		1000	<u>a-se uj</u>	Owning Mix Ankerger	18.8	6,000.00	990 00		-		12,553,760.00	125,317,00	633.965,00	40,000.00	251.075.00
4				Arkentun L081	Ka	54,000 00	4,930.00	72,403,009.60	1,449,169,00	3.446,000.00					
1	28:Apr-15	26802.1	4,400.66	Ker Montal											
-				Genning Ma Payanui	Ke	13,009.00	2,400.00				5,691,840.00	56,918.00	2\$7,438.00	29.920.00	113,837.00
+				Fetting Mix Ankerfrit	X.	10,000.00	2,000 00	1							
1			13,370.00	Torat	-	\$2,000.00	11,720.00	72,408,900.00	1,568,160:00	3,448,099.00	24,533,600.50	225,335.10	1,338,947.40	86,000.00	499,672.00

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	Sch-4.2
Administrative Expenses - Rubber	Kyats
Office Salary	25,438,800.00
Office Accessories	319,800.00
Drinking Expenses	121,990.00
Phone Expenses	122,250.00
Meter Bill & YCDC Tax Charges	317,890.00
Internet Bill	189,000.00
Fuel Expenses	3,004,050.00
General Expenses	811,250.00
Stationery	264,550.00
Postage and Telex Charges	17,000.00
Labour Charges	35,000.00
Bonus Charges	1,190,000.00
Donation Expenses	1,064,700.00
Lawer & Taxes	280,000.00
Entertainment Expenses	1,399,140.00
Hotel Charges	374,500.00
I'mvelling Expenses	18,000.00
Meal Expenses	1,424,500.00
Condo Maintenance fee	204,700.00
Bank Service Expenses	180,189.36
Rent Expenses	2,400,000.00
Repair & Maintenance	348,400.00

÷ 11.

39,525,709.36

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Rubber Planting Expenses Deferred

Sch-4.3

Description	13-14	14-15	15-16	Closing Ba)
Immature Rubber (2-5 years)	21,200,380.00	17,252,450.00	16,774,780.00	55,227,610.00
Replanting Rubber (1 year)	32,962,980.00	3,247,814.00	26,025,451.00	62,236,245.0
	54,163,360.00	20,500,264.00	42,800,231.00	117,463,855.00

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Rubber Sales Statement for the year 2015-2016

Ru	ober Sales States	uent for	the year 201	5-2016											Sch-4.4	
St	n measures in	Estate	RSS + 1		R	\$5.2	R	55 - 3	R	\$5.4	R	\$5-5	Cut	Lump	Gra	sd Total
100	Estate	Lb	Amount	Lb	Amount	1.5	Amount	1.6	Aniount	Lb	Алюцая	Lb	Amount	1.5	Amount	
1	Mayangooe					1,189	622,820			19,969	10,045,900	3.545	746,200	24,703	11,414,920	
2	Paurgkyoneka	1		-		1.174	665,990	350	192,500	1		246	\$5.060	1,770	914,550	
3	Nyaungchaung									540	295,200	1.1		540	195,200	
4	Thanphyutayat	2,367	1,656,900	23,759	19,102,720	1.040	707,200					7,079	1.871,220	34,245	17,338,040	
	Total	2.361	1,656,900	27.759	13,102,720	3,603	1.996,010	350	192,500	20,509	10,341,100	10,870	2,67.7,480	61,258	29,967,510	

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Tangible Assets Less Depreciation

			Original Costi		-		Depreciation		Sch-5
Description	QQ	Pre: year	For the year	Tetal	RNC	Pro Line		0 16000	Net Book Value
			Cost One year	10.1	-	Pic year	For the year	Total	
Office Furniture & Fitting		- asar) (1997) - 199				++	ne 18	**
Chair	10	42,000.00		42,000.00	10%	4.300.00	4.200.00	8,400.00	33,600.0
Chair	4	23.200.00		23,200,00	10%	states a firm	2,120.00	2,229.00	20,820.00
Bodsbeets (3 25 56 5 2)	3	102,000.00	-	102,008.00	10%		(0,200.00	10.200.00	¥1,800.00
Office Table (3+4+2-5)		15,000.00	iai 1	15,000,00	14%		1500.00	7.500.00	13,500.00
Office Machine & Equipme	ent	ni Harina dar	a a 	***	35	1 <u>8</u> .)	57		
Projector	1	447,150.00		\$47,150.00	1015	44,713.00	44,715.00	\$9,430,00	357,720.00
Cooker	1	26:000.00		26,000.00	16%	2,660.00	2,600.00	5,200.00	20.809.00
TP-Link Wireless	2	42,000,00		42,000.00	30%		+ 200.00	4,200.00	37,800.00
Fractor	4	107,200,000,00		107,200,000.00	20%	21,448,000.00	21,440,000.00	\$2,830,000,00	64.320.000.00
Compute Equipment								-	
Comparer	1.30	482,000.00		482,000.00	10%	+8,200.00	48,200.00	96,000.00	385,600.IX
Compute	1	436,500.00		436,500.00	10%	43.650.00	43,650.00	87,300.00	349,200.00
Çomşete	1	477,000.00		\$77,000.00	10%	47,700.00	42 700,00	95,400.00	381,600.00
Çəniputer	1	610,800,90		610,800.00	1014		61.080.00	61,000,00	549,720 0
Machinery			777						
Trastor	71	59,600,000.00		59,600,000.00	20%	11,920,000.00	11.970.000.05	25,840,000.00	23,760,000 00
Ploughshare	2	4,860,000.00		1.260,000 00	20%-	972,000.00	972,000,00	1.944.000/00	2,916,000.00
Motor Cycle	1	650,000.00		680,900.00	10%		58 000 00	00 000 25	612,000 0

Sr.	Florenter	QU	Original Costs					Net Book Value			
-	Description		Pre: year	For the year	Totat	Rate	Pro year	For the year	Total	The pose fine	
51	Rud Wood Novery	-	12	692,000,00	692,000.00	10%				692.000 00	
	Mining Tipper		54.655,898.00		\$4.658.898.00 14.635.398.00	10%	5,465,889.80 5,465,889.80	5,465,889.80 3,465,889.80	10,931,779.60	43,727,118,40	
21	Mining Tipper		\$3,547,778,00		85,347,773,00	10%	8,854,777.80	8,854,777.80	17,709,553.60	50,838,222,40	
- 11	Enick Crane Mobile Crane	2	291 162 737.00	123.214,348.00	291,162,737.00 125:244,348.00	10%	29,116,273.78	29,116,273,70 12,334,434,80	58,232,547,40 12,324,434,80	232,930,189.60 110,919,913.20	
-	Final		654.071 961 60	123.936.548.00	78\$.008.309.00		R5 425,895 18	95 \$97 636 90	179.321.527.00	608.684,782.00	

We hereby sertify that the above Tangible assets are the perpenses of "Myanmar Chemical & Machinery Co., Liff" and in existence at March 71, 2016. The demiled inventory produced includes all Tangible assets

purchased with proper capital expenditure budget and senerion of the board of directors.

Taugible Aisets Register is not Maintaused

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(General Manager/Director)

(Einance Manager/Managing Director)

		Sch-5.1
Tangible Assets for the year imported		Kyats
Mobile Crane		
Import Purchase	\$ 94,000.00	114,492,000.00
Import Direct Expenses		
Import Duty	1,430,140.00	
Commercial tax	7,222,208.00	
Other Tax	100,000.00	
	 	8,752,348.00

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123,244,348.00

	Sch-6
Administrative Expenses	Kyats
Phone Expenses	324,000.00
Enlertainment Charges	6,245,712.00
Water Expenses	153,500.00
Travelling Expenses	9,439,458.00
Stationary Expenses	1,682,590.00
Office Expenses	620,060.00
Uniform Expenses	807,800.00
Hotel Charges	2,934,232.00
Meal Charges	670,000.00
Salary Charges	79,200,000.00
Amendment fee (US\$ 3,883.28)	4,718,044.80
Bank Charges (US\$ 3,873 60)	4,729,835.04
Shop Rental Charges	18,000,000.00
Andit fee	2,500,000.00

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132,025,231.84

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MFTB Bank Statement Sch-7

Description		Debit	Credit			
Description	US\$	Equv Kyats	US\$	Equv: Kyats		
Opening Balance	329,042.45	345,494,572.50				
Payable to MCM Pte Ltd	9,732,386.00	11,854,046,148.00				
Bank Charges		THE PARTY AND A DESCRIPTION OF A DESCRIP	3,727.15	4,539,668 70		
Amendment fee			3,883.28	4,729,835.04		
Transfer Sales			16,160:04	19.682,930.00		
PG Deposit / Refund	81,440.00	99,193,920.00	11,899,549.90	14,493,651,778.20		
PG Refund (pre:year)	1,899,298.55	2,313,345,633.90				
Receivable from MCM Pte						
Exchange Gain		55,041,439.62				
Closing Balance			118,846.63	144,517,502.08		
	12,042,167.00	14,667,121,714.02	12,042,167.00	14,667,121,714.02		

Sch-7.1

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	1	
Bid Bond Deposit	USS	Kyats
Bid Bond Deposit (Opening Balance)	2,626,546.88	2,626,546,880.00
Received back - MICB Bank	(1,899,298.55)	(2,313,345,633.90)
Baok Charges	(146.45)	(178,376.10)
Exchange Gain		571,133,016.08
Closing Balance	727,101.88	884,155,886.08
Bid Bond Deposit (for the year)	11,899,549.90	14,493,651,778.20
Received back - MICE Bank	(81,440.00)	(99,193,920.00)
Closing Balance	11,818,109.90	14,394,457,858.20
Total	12,545,211.78	15,278,613,744.28

	Sch-8
Retained Earning Account	Kyats
Net Profit / (Loss) After Assessment (2001-2002) Net Profit / (Loss) After Assessment (2002-2003)	e e
Net Profit After Assessment (2003-2004)	911,742.00
Net Profit After Assessment (2004-2005)	778,330.00
Net Profit After Assessment (2005-2006)	775,865.00
Net Profit Before Assessment (2006-2007)	100,270.00
Net Profit Afeter Assessment (2007-2008)	1,113,958.00
Net Profit After Assessment (2008-2009)	1,150,952.00
Net Profit After Assessment (2009-2010)	1,670,923.00
Net Profit After Assessment (2010-2011)	2,716,794.00
Net Profit After Assessment (2011-2012)	2,964,962.00
Exchange Reserve	81,900.00
Net Profit (2012-2013)	10,552,258.00
Net Loss (2013-2014)	(29,608,522.27)
Previous year profit & loss adjustment	(432,800.00)
Net Porfit (2014-2015)	1,202,674,155.79
Exchange Gain	365,391,952.08
Net Porfit (2015-2016)	188,783,656.82

1,749,626,396.42

		Sch-9
Cash Summary Statement	(Head Office)	
		Kyats
Opening Balance	7,164,144,587.10	
Add: Import Sales Sales	491,253,000.00	
Construction Income - Myingyan Project	3,251,779,000.00	
Construction Income - Caustice Soda Project	31,270,000.00	
Transfer Sales	19,682,930.00	
Received back from Rubber Planting Project	23,872,550.00	
		10,982,002,067.10
Less: Previous year payable	3,000,000.00	
Withdraw from Rubber Planting Project	270,492,357.00	
Paid for Import Purchase	7,231,364,494.00	
Import Direct Expenses	68,851,016.00	
Import Direct Expenses for Tangible Assets	8,752,348.00	
Construction Costs for Myinchan Project	2,959,980,739.00	
Advance Income tax for Mobile Crane fixed assets	2,860,280.00	
Withholding tax for Construction Income	65,035,580.00	
Advance Commercial tax for Construction Income	154,846,619.00	
Withholding tax for Import Saels (15-16)	9,426,160.00	
Advance Commercial tax for Import Sales (15-16)	23,393,000.00	
Advance Income tax for Import - Custom(15-16)	2,683,565.00	
Advance Commercial tax for Import - Custom(15-16)	6,776,063.00	
Advance Commercial tax for Caustic Soda Project	1,489,100.00	
Withholding tax for Caustic Soda Project	625,400.00	
Construction Costs for Caustic Soda Project	25,641,400.00	
Administrative Expenses	102,077,352.00	(10,937,295,473.00)

Closing Balance

44,706,594.10

Sch-9.1

Payable to MCM Pacific Pte	US\$	Equv: Kyats
Opening Balance	1,041,508.50	1,041,508,500.00
Received - MFTB Bank	9,732,386.00	11,854,046,148.00
Service Income for Office Management from MCM Pacific	(120,000.00)	(146,160,000.00
Exchange Loss		205,741,064.00
	10,653,894.50	12,955,135,712.00
Cach Summary Statem	ant (Dathbar)	Sch-9.2
Cash Summary Statem	ent (Rubber)	Kyats
Opening Balance	5,767,132.00	
Add: From Head Office - TGK	270,492,357.00	
Ruber Sales Income	29,962,710.00	
Received back for Advance Replanting Expenses	1,284,000.00	
Receivable for previous year	22,672,550.00	330,178,749.00
.ess: Rubber Planting Expenses - Immature	11,990,950.00	
Rubber Planting Expenses - Replanting	21,041,245.00	
Assets Purchase for the year	692,000.00	
Previous year payable	6,101,811.98	
and the state of the	23,872,550.00	
Repayment to Head Office - TGK		
Repayment to Head Office - TGK Production & Overhead Costs	255,331,412.05	(319,029,969.03)

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31.3.2016

	Kyats
	31.3.2016
Cash flows from operating activities	
Net profit/(loss) before taxation Adjustments for:	188,783,656.82
Depreciation / Amortisation	95,897,630.90
Exchange adjustment	365,391,952.08
Operating profit/(loss) before working capital changes	650,073,239.80
(Increase)/Decrease in trade & Others receivables	(12,852,545,095.28)
(Increase)/Decrease in Inventory / GIT	(21,303,831.00)
Increase/(Decrease) in payables	5,032,678,619.03
Cash generated from operations	(7,191,097,067.45)
Interest paid	÷
Income tax paid	÷.
Net cash flow from operating activities	(7,191,097,067-45)
Cash flows from investing activities	
Purchase of property, plant and equipment	(123,936,348.00)
Proceeds from sale of equipment	
Net cash used in investing activities	(123,936,348.00)
Cash flows from financing activities	
Proceeds from issuance of share capital	
Proceeds from from long-term borrowings	2
Dividend paid	8
Net cash flows from financing activities	
Net increase/(decrease) in cash and cash equivalents	(7,315,033,415,45)
Cash and cash equivanlents at beginning of the year	7,516,488,791.60
Cash and cash equivalents at end of the year	201,455,376.15

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF CHANGES IN EQUITY AS AT 31.3.2016

KYATS

	Share Capital	Retained Earnings	Total
At 31 March 2015	5,100,000.00	1,195,450,787.52	1,200,550,787.52
Exchange Gain		365,391,952.08	365,391,952.08
Net Profit for the year 2015-2016		188,783,656.82	188,783,656.82
At 31 March 2016	5,100,000.00	1,749,626,396.42	1,754,726,396.42

	MYANMAR CHEMICAL & MACHINERY	Carelo Aracanal - Soura a	ED
	Notes to the Accounts for the year e	nded 31.3.2016	
	(1) Presentation of Financial Statement	a reve o lo	
	Financial Statement of "Myanmar Chemical & Machinery	Co.,Ltd. " are prepared	
	in accordance with Myanmar Accounting Standard,		
	(2) Accounting Policy Financial Statement are based on Historical Cost Convention.		
Not	e		Kyats
Ĩ	Tangible Assets		608,684,782.00
	Details are shown in Sch-5		
2	Deem Profit Adjustment		14,064,362.00
	Deem Profit Adjustment up to (2011-2012) financial year.		
3	Rubber Planting		117,463,855.00
	Immature Rubber (2-5 years)	55,227,610.00	
	Replanting Rubber (1 year)	62,236,245.00	
Ι.		117,463,855.00	1 000 000 00
4	Preliminary Expenses		1,028,000.00
	Preliminary Expenses for Rubber Planting Project.		
5	Deposit		15,279,813,744.28
	Deposit for Rental Of Thahtone	1,200,000.00	
	Receivable - PG Deposit (US\$ 12,545,211.78)	15,278,613,744.28	
		15,279,813,744.28	
6	Receivable Receivable for Bubbor Planting Fungasia		37,960,980.00
	Receivable for Rubber Planting Expenses		
7	Advance Payment		766,589,657.00
	Advance Income Tax (2012-2013) FY	200,000.00	
1	Advance Commercial Tax (2012-2013) FY	200,000.00	
	Advance Commercial Tax (2012-2013) FY	6,493,926.00	
	Advance Income tax on Fixed Assets Purchase(13-14)	9,201,218.00	
	Advance Income tax for Import - Custom(14-15)	202,798,932.00	
	Withholding tax for (14-15) Construction Income	218,488,580.00	
	Withholding tax for (14-15) Vehicle Sales	37,809,219.00	
	Advance Income tax for Truck Crane fixed assets	10,762,015.00	
	Advance Income tax for Mobile Crane fixed assets	2,860,280.00	
	Withholding tax for (15-16) Construction Income	65,035,580.00	<u>.</u>

1	203,708,252.00	
	0.010.101.00	203,708,252.00
		202 208 252 00
Details are shown in Sch (8)	1	
Retained Earning Account		1,749,626,396.42
United and a second of the second sec	14	5,100,000.00
Insued & Bald on Constant		£ 100 000 00
(50000 shares @ 10000 Ks)		
Authorized Capital		500,000,000.00
Physical cash balance as at 31.3.2016 was approved by B.O.D		
Cash in Hand		44,706,594.10
reaction of the environment of the probability of	11,148,779.97	
Estate Cash Balance	[10] S. D. M.	
	4,445,427,97	11,110,772.27
Cash in Hand - Rubber Project		11,148,779.97
Bank Closing Balance as at 31.3 2016 was found to be correct !	by Bank Pass Book.	
	145,600,002.08	
Cash at Bank (NPT - Kyats)	1,000,000.00	
이 것 같은 것 같	the second se	
	144 517 502 08	145,000,002.08
Cash at Bank	/66,589,657.00	145,600,002.08
Advance Payment for shop rental (9) Months	and the second s	
Withholding tax for Caustic Soda Project	625,400.00	
Advance Commercial tax for Caustic Soda Project	1,489,100.00	
Advance Commercial tax for Import - Custom(15-16)	6,776,063.00	
Advance Income tax for Import - Custom(15-16)	2,683,565.00	
a second s	23,393,000.00	
Advance Commercial tax for (15-16) Construction Income	154,846,619.00	
	Advance Commercial tax for Import - Custom(15-16) Advance Commercial tax for Caustic Soda Project Withholding tax for Caustic Soda Project Advance Payment for shop rental (9) Months Cash at Bank Cash at Bank (MFTB US\$ 118,846.63) Cash at Bank (MFTB US\$ 100) Cash at Bank (MPT - Kyats) Bank Closing Balance as at 31.3 2016 was found to be correct Cash in Hand - Rubber Project Rubber office Cash Balance Estate Cash Balance State Cash Balance Cash in Hand Physical cash balance as at 31.3.2016 was approved by B.O.D Authorized Capital (50000 shares @ 10000 Ks) Issued & Paid up Capital (510 Shares @ 10,000 Ks)	Withholding tax for Import Saels (15-16) 9,426,160.00 Advance Commercial tax for Import - Custom(15-16) 23,393,000.00 Advance Commercial tax for Import - Custom(15-16) 2,683,565.00 Advance Commercial tax for Caustic Soda Project 1,489,100.00 Withholding tax for Caustic Soda Project 625,400.00 Advance Payment for shop rental (9) Months 13,500,000.00 Advance Payment for shop rental (9) Months 13,500,000.00 Cash at Bank 766,589,657.00 Cash at Bank (MFTB US\$ 118,846.63) 144,517,502.08 Cash at Bank (MFTB US\$ 118,846.63) 1,000,000.00 Cash at Bank (MFTB US\$ 118,846.63) 1,000,000.00 Cash at Bank (MFTB US\$ 113,2016 was found to be correct by Bank Pass Book. 0.145,600,002.08 Bank Closing Balance as at 31.3 2016 was approved by B.O.D 11,148,779.97 Cash in Hand Physical cash balance as at 31.3.2016 was approved by B.O.D 11,148,779.97 Cash in Hand Physical cash balance as at 31.3.2016 was approved by B.O.D 11,148,779.97 Cash in Hand Physical cash balance as at 31.3.2016 was approved by B.O.D 11,148,779.97 Cash in Hand Physical cash balance as at 31.3.2016 was approved by B.O.D 11,148,779.97 Cash in Gaue as at 31.3.

15 Payable

Payable for (2015-2016) financial year's audit fee. Payable for Import Purchase (14-15) (US\$ 1,919,164.95) Payable for Import Purchase (15-16) (US\$ 157,492.16) Payable to MCM Pacific Pte (US\$ 10,653,894.50)

16 Revenue

Relevant Documents for Operating Income were presented by B.O.D but some income were provided by credit vouchers only.

17 Operating Expenses

Relevant Vouchers for Operating Expenses were presented by B.O.D but some expenses were provided by debit vouchers only.

18 Administrative Expenses

Relevant Vouchers for Operating Expenses were presented by B.O.D but some expenses were provided by debit vouchers only.

2,500,000.00 1,919,164,950.00 191,825,446.01 12,955,135,712.00 15,068,626,108.01

132,025,231.84

3,763,736,043.00

5,068,626,108.01

3,436,741,328.06

FINAL ACCOUNT

AND

AUDIT REPORT

(2014 - 2015)





Myanmar Chemical & Machinery Co., Ltd.

No. 1120/1121, Thumingalar Road, 16/4 Quarter, Thingangyun Tsp, Yangon, Myanmar. Tel : 95-1-562020, 562021 Fax: 95-1-577148, 562131 E-mail: mcm@myanmar.com.mm

STATEMENT OF THE DIRECTORS

 We
 and
 being two Directors of

 Myanmar Chemical & Machinery Co., Ltd
 do here by state that, in the opinion of the

 Directors, the accompanying Accounts made up to March 31*, 2015. Schedules and Notes to the

 Accounts are drawn up so as to give a true and fair view of the state of affair of the Company, and of the

 result of the Company for the year ended on the date of this statement. Entries of the responsible persons

 of the Company as to receipt and payment, and documents concerned assigned to Ngwe Inzaly Audit

 Firm for auditing of Final yearly account for the financial year.
 2014 - 2015
 We believe

 that the Company will be able to pay its debts as and when they fall due, and all accounts receivable are
 good and recoverable.

We admitted that the auditing done on the submission of our data presented is right. If there is the occurence of Income-bearing business besides the said account. It is the obligations of all the share holders of the Company

We support that the facts above mentioned are true and correct according to section 133 (1) (2) of the Myanmar Company Act

Daw Khin Nwe Mar Tun Director Myanmar Chemical & Machinery Co., Ltd.

± 7 Ara 2016

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF FINANCIAL POSITION AS AT 31.3.2015

2013-2014		B et for the f	2014-2015
Kyats	Assets	Note	Kyats
	Non-Current Assets		
536,712,918,00		17	580.646,064.90
230,712,918.00	Tangible Assets	3	580,646,064.90
	Intangible Assets		
14.064.362.00	Deem Profit Adjustment	2	14,064,362.00
	Current Assets		
114,796,890.00	Rubber Planting	3	74,663,624.00
239,619,435.63	Inventory	- 24	21,496,400.00
1.028,000.00	Preliminary Expenses	5	1.028.000.00
713,924,160.00	1 0	6	2,627,746,880.00
- U 001-FOCO1X03.01 #	Receivable	7	82,129,930.00
18,495,144.00	Advance Payment	8	521,942,476.00
546,395,604.00		9	346,577,072.50
and the second sec	Cash in Hand - Rubber Project	10	5,767,132.00
	Same of the real of the second second second		
2,278,582:10	Cash in Hand	H.	7,164,144,587.10
2,188,227,407.73	Total Assets		11,440,206,528.50
	Equity & Liabilities		
500,000,000.00	Authorized Capital	12	500,000,000.00
20010001000000	(50000 shares @ 10000 Ks)		200,000,000,000
	(50000 shares @ 10000 K3)		
5,100,000.00	Issued & Paid up Capital	13	5,100,000.00
e ha strender	(5(0 Shares @ 10,000 Ks)		2010/02/07/07/04/04/0
(6,790,568,27)	Retained Earning Account	14	1,195,450,787,52
	Current Liabilities		
11,305,300.00	Provision for Commercial tax	15	17,019,585.00
438,612,676.00	Payable	16	10,222,636,155.98
1,740,000,000.00	Creditors		÷
2,188,227,407.73	Tara Equity Aliabilities		11,440,206,528.50
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Dav	Khin Nwe Mar Tun Director	Sinh	Steer Condo (1854) Steer Condo (1854) milavia Rocci & Merchant-

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Room. 801, Tower B, 50^m Street Condominium (AMPS), 50^m Street, Between Maha Bandula Road & Nerchant Road, Botahtaung Township, Yangon, Myanmar. Tel : 095000752, 095119742, 0973049312 095342805, 397424, 397575 Gmail : ngweinzal@gmail.com Website : www.ngweinzalyaudit.com

AUDITOR'S REPORT

MANAGING DIRECTOR

MYANMAR CHEMICAL & MACHINERY CO., LTD

We have audited the accompanying balance sheet of the Myanmar Chemical & Machinery Co., Ltd as of March 31, 2015 and income statement, statement of change in equity and cash flow statement for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Myanmar Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test hasis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with the Section 145(1)(2) of the Myanmar Companies Act, we report that :

In our opinion,

(1) Subject to our notes to the Financial Statements, the Company's accounts and statements are properly drawn up in conformity with the provisions of the Myanmar Companies Act and Myanmar Accounting Standards so as to exhibit a true and fair view of the financial position of the Company as of March 31, 2015 and of its financial performance and its cash flows for the year then ended, according to informations and explanations given to us.

(2) Our audit has been conducted based on the books and records provided by the Company, have been maintained according to Section 130 of the Myanmar Companies Act.

AUDITOR Date: 7 APR 2016 Vangon.

0 DAW AVE THIDA B.Com (Q), C.P.A Accountant and Auditor Rm(891), Tower(B), Sth Floor, 50th Steet Condo (AMPS). Bet : Maharhundoola Road & Merchant Road

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31-3-2015

		Kyats
Revenue	Sch-1	21,830,517,532.00
Less: Operating Expenses	Sch-2	(20,470,645,025,61)
Gross Profit / (Loss)		1,359,872,506.39
Add: Exchange Gain	Sch-7.2	68.912.008.50
Less. Depreciation for the year	Sch-5	(65,300,500.50)
Less: Administrative Expenses	Sch-6	(178,230.834.00)
Net Profit / (Loss)		1,185,253,180.39
Add: Capital Gain	Sch-5.2	17,420.975.40
Net Profit after Capital Gain		1,202,674,155,79
Li Aurg Haing Os Managing Director Myanmar Criemical & Machinery Co., 190 Daw Khin Nive Mar Tun Director Myanmar Chemical & Machinery Co., Ltd.	B Acco Rm(80) 50th S	W AYE THIDA Cont (Q), C.P.A untant and Auditor), Tower(II).8th Floor, test Condo (AMPS), soota Rosal & Merchant Ros

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		Sch-1
		Kyats
Sch-2		10,924,429,000.00
Sch-3.1		10,626,189,620.00
Sch-4.1		165,613,197.00
g (US\$ 120,000)	120,000,000.00	
	(5.714.285.00)	114,285,715.00
	-	21,830,517,532.00
	Sch-3.1 Sch-4.1	Sch-3.1 Sch-4.1 g (US\$ 120,000) 120,000,000.00

			Sch-1.1
Operating Expenses			Kyats
Costs for Construction	Sch-2,1		10,178,235,545.00
Import Costs of Goods Sold	Sch-3		9.721.460,079.00
Expenses for Rubber Sales			
Production Expenses	Sch-4	517,342,446.24	
Overhead Expenses	Sch-4.2	\$3,606,955.37	570,949,401.61

2

20,470,645,025.61

Coustruction Income

Piping Works - (မြင်းခြံသံမဏိစက်ရုံ) Piping Works - (မြင်းခြံသံမဏိစက်ရုံ) Sch-2

Kyats

6,747,282,000.00 4,177,147,000.00

10,924,429,000.00

Sch-2.1

Kyats

8,495,467,680.00 970,697,470.00 481,015,000.00 231,055,395.00

10,178,235,545.00

Costs for Construction

Direct Material Expenses Direct Labour Expenses Crane Charges Indirect Expenses

Construction Income Schedule									
Sr.	Project Name	Contract Value (Ks)	Remark						
	Piping Works - (မြင်းခြံသံမဏိစက်ရံ) Piping Works - (မြင်းခြံသံမဏိစက်ရံ)	6,747,282.000.00 4,177.147,000.00	134,945,640.00 83,542,940.00						
		10,924,429,000.00	218.488,580.00						

a Schodule c. . . . etion Ir

Withholding tax Schedule

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Sch-2.3

Sr.	Project Name	Cash Received	Withholding tax	Date
i	 Piping Works - (မြင်းခြံသံမဏိစက်ရုံ)	2,418,760,000.00	48,375,200.00	31.12.2014
2	Piping Works - (မြင်းခြံသံမဏိစက်ရုံ)	1.429,476,000.00	28.589,520.00	13.1.2015
3	Piping Works - (မြင်းခြံသံမဏိစကံရ်)	1,598,320.000.00	31,966,400.00	6.2.2015
4	Piping Works - (မြင်းခြံသံမဏိစကဲရှိ)	1,639,633,000.00	32,792,660.00	16.3.2015
5	Piping Works - (မြင်းခြံသံမဏိစက်ရုံ)	2,161,113,000.00	43.222.260.00	16.3.2015
6	Piping Works - (မြင်းခြံသံမဏိစကဲရှိ)	584,689,000.00	11,693,780.00	24.3.2015
7	Piping Works - (မြင်းခြံသံမဏိစကဲရံ)	674,724,000.00	13.494.480.00	25.3.2015
8	Piping Works - (မြင်းခြံသံမဏိစက်ရံ)	417,714.000.00	8,354,280.00	25.3.2015
		10,924,429,000.00	218,488,580.00	

		Sch-3
Import Costs of Goods Sold		Kyats
Import Purchase	\$ 8.479.164.95	8,479,164,950.00
Import Direct Expenses		
Commercial tax	569,228,731.00	
Import Duty	172,877,964.00	
Other tax	238,162,924.00	
Security fee	1,680,000.00	
Import Expenses for Fertilizer	2,944,850.00	
Agent fee	12.060.000.00	
Container Charges	13,100,000.00	
Custom Clearance Charges	3,201,400.00	
Demurrage Charges	80,021,160.00	
Detention Charges	42,768,000.00	
General Expenses	7,722,890.00	
Labour Charges	6.858,700.00	
Licence fee	680,000.00	
Port Charges	509,310.00	
Release Order fee	110,000.00	
Transport Charges	90,369,200.00	
		1,242,295,129.00

9,721,460,079.00

ch-3.1	1
ch-3.1	l

Kyats

Import Sales (Light Truck - 200 Nos)
Import Sales (Deformed Bar - 20.515.15 Tons)
Import Sales (Fertilizer - 250 Tons)

Import Sales

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\$ 1,720,000.00	1,890,460,920.00
\$ 6,720,414.95	8,668,152,300.00
\$ 38,750.00	67,576,400.00
 8,479,164.95	10,626,189,620.00

Impo	ort Purchase Schedule (Light Truck 20	0 Unit	s)			ri	M				Sch-3.2
Sr.	Description	Unit	Qty	Amt (US\$)	Import Sales (Ks)	WT (Ks)	Import Duty	Commercial Tax	Other Tax	2% Tax	Security Fees
	Brand New Light Truck(4x2)	Ų	50.00	430,000.00	472.615.230,00	9,452.305	28,890.000	49,594,500	116.362,500	19,260,000	500,000
2	Brand (Facton (Aumark FI), Model 2012) Brand New Light <u>Trock(4x2)</u> Brand: Foton (Aumark FL), Model 2012	Ų	59.00	430,000,00	472 615.230 00	9.452.305	28.890.000	49.594.500	116.362,500	19 260,000	500.000
3	Brand New Light Truck(452) Brand: Foton (Aumark FL), Model,2012	U	50,00	430.0 00 00	472.615.230.00	9,452.304	16.680,750	28,635,288	2.718.962	-	340 000
	<u>Brand New Light Truck(4x2)</u> Brand: Foton (Aumark FL), Model:2012	υ	50,00	430.0 00.00	472.615.230.00	9,432,305	16.680.750	28.635.288	2.7)8.962	-	340.000
	<u>]'otal</u>		200.00	1,720,000.00	1,890,469,920.00	37,809.219	91,141,500	156,459,576	238,162,524	38,520,000	1,680,000

Import Purchase Schedule (Deformed Bar)

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1111	for Purchase Schedille (Deformed Ba										301-3.5
Sr.	Description	Unit	Qty	And (USS)	Import Sales (Ks.)	WT (K8)	Import Duty	Commercial Tax	Other Tax	2% Tax	Security Fees
	Deformed Bar										
5	1032	MT	459.97	160,989 50			1,795.722	9,068.401	•	3.591.446	-
	Deformed Bar										
6	D12	М٦	3,964,55	1.387.591.45			42,561,168	214,933,902	-	85 122.337	-
	D14	MT	793.32	277.660.25							
	D16	MT	6,099.58	2,134.852.65	8.668.152,300.00						
	Deformed Bar										
7	D18	MT	79 8,10	239,430,90			37,379,574	188.766,852		74,759,149	
	D20	M1	3.808.77	1,142,631,30							
	D22	мт	792,84	237,851,40							
	D25	MI	3.798.03	1.139.407.50							
	Total		20,515,15	6.720.414.95	8,668,152,300.00		81,736,464	412,769,155	-	163,472,932	

Sch-3.3

Imp	ort Purchase Schedule (Fertilizer)										301-3.4
Şr.	Description	l€nit	Qiy	<u>Amt (US\$)</u>	Import Sales (Ks)	WT (Ks)	Import Duty	Commercial Tax	Other Tax	2% Tax	Security Fees
10	Compound Fertilizer	Kg	250,000.00	38,750.00	67.576.400.00		-	-		806,000	
	Total			38,750.00	67,576,400.00				-	806,000	-

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Sch-34

Mannfacturing Account fo	r the year ended 31.3.2015	Sch-4
Rubber Planting Project		Kyats
Direct Labour (Yapping Charges)	60,370,624.00	
Direct Material	865,720.00	
Direct Expenses	1.800,000.00	63,036,344.00
Rubber Estate Salary		166,879,698.63
Processing Expenses		
Indirect Expenses	3,971,300.00	
Fixed Expenses	8,905,742,98	
Travelling Charges	115,000.00	
Machine Repair Charges	291,860.00	
		13,283,902,98
Depreciation for the year		34,523,065.00
Production Costs for (828.148 lbs)	—	277,723,010.61
Add: Deferred Expenses for Opening Inventory (140.8	45.80 lbs)	239,619.435.63
Deferred Expenses (140,845.80 lbs)		517,342,446.24
Direct Material		Kyats
Purchase		22,362,120.00
Less: Closing Inventory		(21,496,400.00)
		8 (= 730.00
	_	865,720.00
		Sch-4.1
Sales Income		Kyats
Rubber Sales		165,613,197.00

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	Sch-4.2
Administrative Expenses - Rubber	Kyats
Office Salary	30,592,982.00
Office Accessories	1,369,950.00
Drinking Expenses	144,040.00
Phone Expenses	296,197.00
Meter Bill & YCDC Tax Charges	554,980.00
Internet Bill	1,383,298.00
Fuel Expenses	4,683,500.00
General Expenses	2,311,951.00
Stationery	782,040.00
Postage and Telex Charges	39,600.00
Medical Expenses	500,000.00
Staff Welfare	2,810,000.00
Donation Expenses	227,582.00
Painting Expenses	630,000.00
Entertainment Expenses	1,830,989.00
Hotel Charges	864,600.00
Travelling Expenses	53,240.00
Meal Expenses	1,247,000.00
Rent Charges	2,400,000.00
Bank Service Expenses	260.706.37
Repair & Maintenance	624,300.00
	53,606,955,37

53,606,955.37

Rubber Planting Expenses Defe	erred			Sch-4.3
Description	13-14	14-15	Receivable	Closing Bal:
Immature Rubber (2-5 years) Replanting Rubber (1 year)	73,360,065.00 41,436,825.00	17,252,450.00 3,247,814.00	52.159.685.00 8.473.845.00	38.452.830.00 36,210,794.00
	114,796,890.00	20,500,264.00	60,633,530.00	74,663,624.00

Rub	Rubber Sales Income Schedule Sch-4.4										Sch-4.4								
Sr.	Month]	RSS - 1	ſ	RSS - 2	R	.\$\$ - 3	I	RSS - 4	ŀ	RSS - 5		Cutting		Forth	Co	plump	Gra	nd Total
ər.	NATOUTH	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)	Lbs	Anit (Kyats)	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)	Lbs	Amt (Kyats)
ł	April	38.452	31.502.040	4.619	3,968,510	7.347.70	5.346,266	8.815	7,368,760	27.150	22.318.500	263	159,750	18.00	9,900	31.846.10	12.857.796	118.510.80	83,531,522
2	May	1.970	1,182,000	3,410	1.977.800	4.683.00	2.622.480	1.095	613,200	3,127	1.751,120	L	550	-	-	3.978.00	974.610	18.264.00	9,121,760
3	June	-	-	-	-	30.00	16.800	-	-	-	-	-	-	-	-	20,434,00	5.029.970	20,464,00	5.046.770
4	July	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
5	August	-	-	-	-	-	-	-	-	-	-	-		-	••	-	-	-	-
6	September	1.482	992,940	-	-	-	-	990	603,900	2.820	1.698.600	-	-		-	1.140.00	287.100	6.432.00	3,582,540
7	October	4,729	3.073.850	-	-	1.650,00	1.006.500	1.603	961.800	5.243	3.145.800	-	-	-	-	3.550.00	852.000	16.775.00	9.039.950
8	November	2.583	1.678,950	-	-	3.944.00	2.331.520	2.818	1.615.900	6.786	3,549.520	-	-	-		3.203.00	761.670	19,334.00	9.937.560
9	December	23,389	14,385,820	5.700	3,475.000	4.836.00	2.821.760	1.116	613.800	9,459	4.987.020	-	-	-		3.783.00	924,630	48.283.00	27.208.030
10	January	5,484	3,564.600	-	-	1.850.00	980,500	660	316.800	5.158	2.521.390	-	-	-	-	1.912.00	427.580	15.064.00	7.810.870
П	February	1,870	1.028.500	1.536	844.800	4,278.00	2.267,340	550	275.000	835	400.800	-	-	-	-	1.296.00	259.200	10,365.00	5.075,640
12	March	-	-	4.099	2,438.905	263.00	154,550	550	294.250	3.569	2.014.810	-	-	-	-	1.356.00	356,040	9.837.00	5.258.555
																			ļ]
		79,959	57.408.700	19.364	12,705.015	28.881.70	17.547.716	18,197	12,663,410	64,147	42.387.560	26-1	160.300	18.00	9,900	72,498.10	22.730.596	283.328.80	165.613,197

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Tangible Assets Less Depreciation

r. Description (Original Costs		Rate		Disposal Sales	Net Book Value		
	Qty	Pre: year	For the year	Total	Total	Pre: year	For the year	Total		
I <u>Furniture</u>										
Chair	10	42.000.00		42,000.00	10%	-	4,200.00	4,200,00		37,800.00
Chair	4		23,200,00	23,200.00	10%	-	-	-		23.200.00
2 Machinery & Equipment				-			-	-		-
Projector	1	447.150.00		447.150.00	10% à	-	44,715.00	44,715,00		402.435.00
Tractor	2	59.600.000.00		59,600,000,00	20° o	-	11,920,000,00	11.920.000.00		47.680.000.00
Ploughshare	2	4.860.000.00		4.860.000.00	20%ø	-	972.000.00	972,000,00		3,888,000.00
Cooker	Т	26.000.00		26.000.00	10%	-	2,600,00	2,600.00		23,400.00
Tractor	L	107.200.000.00		107.200.000.00	20%	-	21.440.000.00	21.440.000.00		85,760,000,00
IP-Link Wireless	2		42,000.00	42,000.00			-	-		42,000.00
3 Computer Equipment							-	-		
Computer	1	482.000.00		482.000.00	10%	-	48,200.00	48.200.00		433,800,00
Computer	1	436.500.00		436.500.00	10%a	-	43.650.00	43.650.00		392,850.00
Computer	ι	477.000.00		477,000.00	10º.;	-	47,700.00	47,700.00		429,300.00
Computer	Т		610.800.00	610,800.00		-	-	-		610,800.00
4 Mining Tipper	1	54,658.898.00		- 54.658.898.00	10%	_	- 5.465.889.80	5.465.889.80	49.193.008.20	-
Mining Fipper		54,658.898.00		54.658.898.00	10%	-	5,465.889.80	5.465.889.80	49.193.008.20	-
Mining Tipper		54.658.898.00		54,658,898.00	10%	-	5.465.889.80	5.465.889 80	49.193.008.20	-
Mining Tipper		54.658.898.00		54.658.898.00	10%	-	5.465.889.80	5.465.889.80		49,193,008.2
Mining Tipper	j	54,658.898.00		54.658.898.00	10%	-	5.465.889.80	5.465.889.80		49.193.008.2
Mining Tipper		88.547,778.00		88.547.778.00	10%	-	8.854.777.80	8.854,777.80		79,693.000.2

Sch-5

Tangible Assets Less Depreciation

Sr.	Description	OIY		Original Costs		Rate		Disposal Sales	Net Book Value		
11	Descopilion	713	Pre: year	For the year	Teral	Nate	Pre year	For the year	Total	isighosar sures	TREE LODGES AND C
					×						
								24			
\$	Motor Cycle	. <u>.</u>		680.000.00	680.000.00	10%			5a		680.000.00
					121			9	3		-
è	Office Furnitory & Futing	8			3+				14		-
	Bedsheets (3.25'vn 5x2)	3		102,900,00	102.000.00	10%	24	ē			102,000,00
	Office Table (3x4x2.5)	3		15,000.00	13.000.00	10%			2.4		15.000.00
					ē			E.	14		=
7	Truck Crine	3		291,162,737.00	291.162.737.00	10%		29,116,273.70	29.116.273 70		262,046,463,30
											× X
	(oluit		\$35,412,918,00	292,635,737,00	X28.048.655.00			99.823.565.50	99,823 565:50	147.579.021.60	580.646.064.90

We hereby certify that the above Tangible assets are the perpendice of "Myanmar Chemical & Machinery Co., Ltd"

and in existence at March 31, 2015. The detailed inventory produced includes all Langible assets.

purchased with proper capital expenditure budget and superior of the board of directors.

Tangible Assess Register is not Maintained

(General Manager/Director) Diaw Knim Nove Mar 140 Director Myanmar Chemical & Machinery Co., Ltd.

(Finance Manager-G 03 Hard Otto Die e mil transical a Marthaves Co. 1 m.

Sch-5

		Sch-5.1
Purchase of Tangible Assets During the year Truck Crane (3) Nos		Kyats
Import Purchase 5	254,718.00	254.718,000.00
Import Direct Expenses Import Duty Commercial tax	9,085,660.00 27,359,077.00	
		36,444,737.00
		291,162,737.00
		Sch-5,2
Disposal Account		Kyats
Disposal Account		Kyais
Mining Tipper (3) Nos		165.000,000.00
Less: Net Book Value	Sch-5	(147,579,024.60)
Disposal Gaiu		17,420,975.40

Sch-6

Administrative Expenses	Fertilizer	Shop	Office Expenses	Kyats
Advertising Expenses	496,560.00	2,276,200.00		2,772,760.00
Hotel Charges			389,000.00	389,000.00
Store Expenses	13,728,000.00	-		13,728,000.00
Transport Charges	6,852,000.00			6,852,000.00
Labour Charges	342,000.00	÷		342,000.00
Entertainment	223,900.00	61,450.00	11,035,274.00	11,320,624.00
Donation Expenses			5,222,500.00	5,222,500.00
Present & Gift Expenses			18,563,375.00	18,563.375.00
Phone Expenses	3,000.00	20,000.00	2,411,975.00	2,434,975.00
Meter Bill Expenses			936,240.00	936.240.00
Fuel Expenses	590,200.00	832,350.00		1,422,550.00
General Expenses	301,350.00	385,850.00	1,317,445.00	2,004,645.00
Drinking Water	1,800.00	-	173,250.00	175,050.00
Stationary Expenses	6,800.00	52,550,00	3,805,255.00	3,864,605.00
Newspaper & Others			58,500.00	58,500.00
Postage & Telex Charges	3.500.00	÷	128,200.00	131,700.00
Kitchen Charges			3.550,400.00	3,550,400.00
Medical Expenses			491,525.00	491,525.00
Tender Documents Expenses			560.000.00	560,000.00
Salary Expenses			71.500.000.00	71,500,000.00
Bank Charges		320,250.00	19.301,100.00	19,621,350.00
Electrical Expenses		377,600.00		377,600.00
Meal Expenses		76,750.00		76,750.00
Office Expenses		124.730.00	2,969,955.00	3,094,685.00
Sign Board Expenses		420.000.00		420,000.00
Travelling Expenses		45,700.00	774.300.00	820,000,00
Shop Rental Charges		4,500,000.00		4,500,000.00
Audit fee		3,000,000.00		3,000,000.00
-	22,549,110.00	12,493,430.00	143,188,294.00	178,230,834.00

MFTB Bank Statement

Sch-7

Description		Debit	(redit		
Description	US\$	Equv: Kyats	USS	Equv. Kyats		
Opening Balance	569,076 15	546,313,104.00				
Transfer Purchase	1,101,884.78	1,101,884,780.00				
Bank Charges			17,613.57	17,613,570.00		
Transfer Sales			600,000.00	600,000,000.00		
PG Deposit / Refund	36,020.00	36.020.000.00	2,662,566.88	2,662,566,880.00		
PG Refund (pretyear)	740.733.47	740.733,470.00				
Payable to MCM Pre	1.369.990.23	1,369,990,230.00				
Receivable from MCM Pte			208,481.73	208,481,730.00		
Exchange Gain		39,215,168.50				
Closing Balance			329,042.45	345,494,572,50		
	3,817,704.63	3,834,156,752.50	3,817,704,63	3,834,156,752.50		

Sch-7.1

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Bid Bond Deposit	US\$	Kyats
Bid Bond Deposit (Opening Balance)	742,421.00	712,724,160.00
Received back - MICB Bank	(740.733.47)	(740,733,470.00)
Bank Charges	(1,687.53)	(1,687,530.00)
Exchange Gain		(29,696,840.00)
Bid Bond Deposit (for the year)	2.662.566.88	2,662,566,880,00
Received back - MICB Bank	(36,020.00)	(36,020,000.00)
Closing Balance	2,626,546.88	2,626,546,880.00

	Sch-7.2
Exchange Gain	Kyats
MICB Bank	29,696,840.00
Bid Bond Account	39,215,168.50
	68,912,008.50

	Sch-8
Retained Earning Account	Kyats
Net Profit / (Loss) After Assessment (2001-2002)	
Net Profit / (Loss) After Assessment (2002-2003)	-
Net Profit After Assessment (2003-2004)	911,742.00
Net Profit After Assessment (2004-2005)	778,330.00
Net Profit After Assessment (2005-2006)	775,865.00
Net Profit Before Assessment (2006-2007)	100,270.00
Net Profit Afeter Assessment (2007-2008)	1,113,958.00
Net Profit After Assessment (2008-2009)	1,150,952.00
Net Profit After Assessment (2009-2010)	1,670,923.00
Net Profit After Assessment (2010-2011)	2,716,794.00
Net Profit After Assessment (2011-2012)	2,964,962.00
Exchange Reserve	81,900.00
Net Profit (2012-2013)	10,552,258.00
Net Loss (2013-2014)	(29,608,522.27)
Previous year profit & loss adjustment	(432,800.00)
Net Portit (2014-2015)	1,202,674,155.79

1,195,450,787.52

CASH	SUMMARY	STATEMENT
A	D.C. H. H. H. H. H.	The state of the state of the

		Kyats
Opening Balance	2,278,582,10	
Add: Import Sales Sales	10,604,693,220.00	
Construction Income	10,924,429,000.00	
Transfer Sales	600,000,000.00	
Disposal Sales	165.000.000.00	
Received back from Rubber Planning Project	91,039,022.00	
		22,387,439,824.10
Less: Paid to Creditors	1,740,000,000.00	
Withdraw from Rubber Planting Project	266.146.566.00	
Transfer Purchase	1.101.884.780.00	
Construction Costs for Myinchan Project	10,178.235,545.00	
Import Direct Expenses	1,242.295,129.00	
Advance Income tax - Custom	202,798,932.00	
Withholding tax for Construction Income	218,488,580,00	
Withholding tax for Vehicle Sales	37.809,219.00	
Advance Income tax for Truck Crane	10.762,015.00	
Direct Expenses for Truck Crane	36,444,737,00	
Office Rental Charges	36,000,000,00	
Previous year payable	1,000.000.00	
Administrative Expenses	151,429,734.00	(15,223,295,237.00)

Closing Balance

7,164,144,587.10

Payable to MCM Pacific Pte	US\$	Equv: Kyats
Received - MITB Bank	1.369.990.23	1.369,990,230.00
Paid for Behalf of MCM Pacific Pre - MITTB	(208,481.73)	(208,481,730.00)
Service Income for Office Management from	(120,000.00)	(120,000,000.00)
MCM Pacifie Pie		
	1,041,508.50	1,041,508,500.00

Sch-9

		Sch-9.1
CASH SUMMARY STAT	EMENT (Rubber)	
		Kyats
Opening Balance	912.312.00	
Add: From Head Office - 1GK	266,146,566,00	
Ruber Sales Income	165,613,197.00	
	·	432,672,075.00
Less: Rubber Planting Expenses - Immature	17,252,450.00	
Rubber Planting Expenses - Replanting	3,247,814,00	
Assets Purchase for the year	1.473.000.00	
Previous year payable	21,098,985.00	
Repay to Head Office - TGK	91,039,022.00	
Porduction Costs	237,231,358.63	
Overhead Costs	51,073,727.37	
Advance pay for Replanting	4,488,586.00	
		(426,904,943.00)
Closing Balance	-	5,767,132.00
Profit & Loss Adjustment for previous year		Kyats
Profit & Loss - Internet Payable		132,800.00
Profit & Loss - Phone		1,300,000.00
Portît & Loss - Cash at Bank		(1,000,000.00)

432,800.00

	Sch-9.2
Payable for Rubber Planting Project	Kyats
Meter Bill	68,200.00
Phone Bill	5,900.00
Internet Bill	59,125.00
Payable for Fixed Expenses	5,968,586.98
Payable for Fertilizer	21,496,400.00
	27,598,211.98

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31.3.2015

	Kyats
	31.3.2015
Cash flows from operating activities	
Net profit/(loss) before taxation	1,202,674,155.79
Adjustments for:	
Depreciation / Amortisation	99,823,565.50
Fixed Assets write off	1,300,000.00
Disposal Profit	(17,420,975.40)
Opening adjustment	(432,800.00)
Operating profit/(loss) before working capital changes	1.285,943,945.89
(Increase)/Decrease in trade & Others receivables	(2,499,399,982.00)
(Increase)/Decrease in Inventory / GIT	258,256,301.63
Increase/(Decrease) in payables	8,049,737,764.98
Cash generated from operations	7.094,538,030.50
Interest paid	
Income tax paid	
Net cash flow from operating activities	7.094,538,030.50
Cash flows from investing activities	
Purchase of property, plant and equipment	(292,635,737.00)
Proceeds from sale of equipment	165,000,000.00
Net cash used in investing activities	(127,635,737,00)
Cash flows from financing activities	
Proceeds from issuance of share capital	
Proceeds from from long-term borrowings	
Dividend paid	
Net cash flows from financing activities	
Net increase/(decrease) in cash and cash equivalents	6,966.902,293.50
Cash and cash equivanlents at beginning of the year	549,586,498.10
Cash and cash equivalents at end of the year	7,516,488,791.60

MYANMAR CHEMICAL & MACHINERY COMPANY LIMITED STATEMENT OF CHANGES IN EQUITY AS AT 31.3.2015

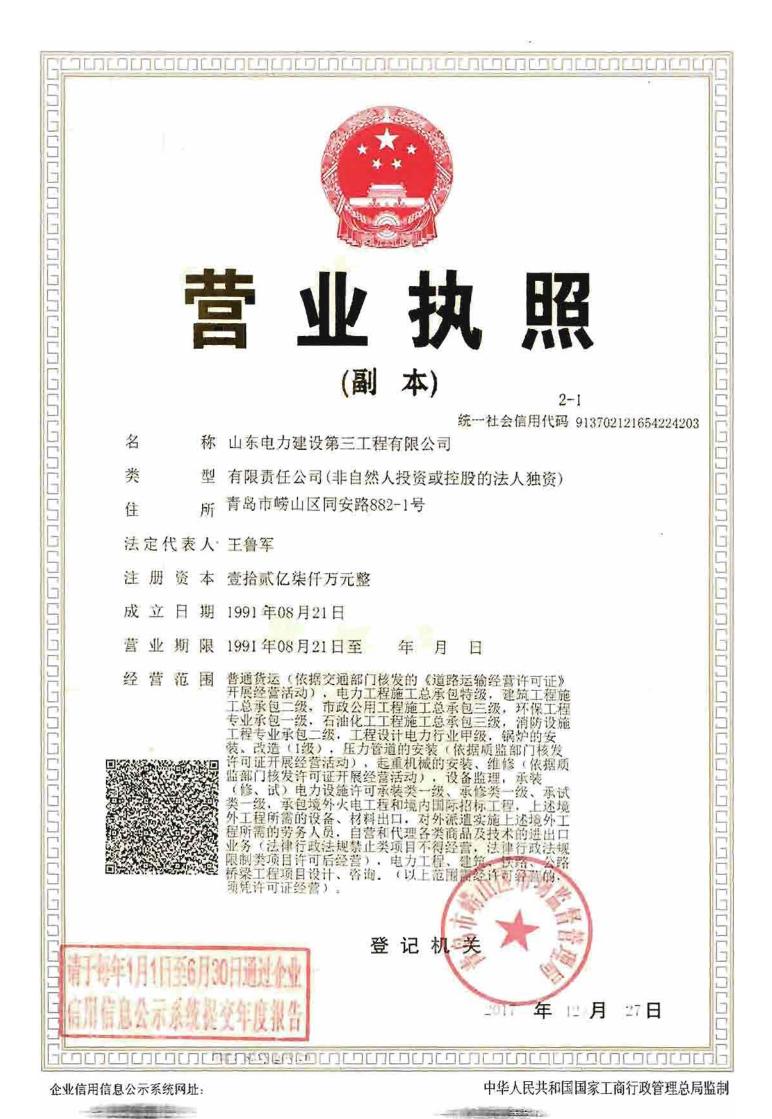
KYATS

	Share Capital	Retained Earnings	Total
At 31 March 2014	5,100,000.00	(6,790.568.27)	(1,690,568.27)
Previous year profit & loss adjustment		(432,800.00)	(432,800.00)
Net Profit for the year 2014-2015		1,202,674,155,79	1,202,674,155.79
At 31 March 2015	5,100,000.00	1,195,450,787.52	1,200,550,787.52

	MYANMAR CHEMICAL & MACHINEI	RY COMPANY LIMI	red
	Notes to the Accounts for the year	r ended 31.3.2015	
	(1) Presentation of Financial Statement		
	Financial Statement of " Myanmar Chemical & Machi	nery Co., Ltd. " are prep	pared
	in accordance with Myanmar Accounting Standard (2) Accounting Policy		
	Financial Statement are based on Historical Cost Convent	tion.	
Note			Kyats
1	Tangible Assets		580,646,064.90
	Details are shown in Sch-5		
2	Deem Profit Adjustment		14,064,362.00
-	Deem Profit Adjustment up to (2011-2012) financial year	ar	
3	Rubber Planting		74,663,624.00
×	Immature Rubber (2-5 years)	38,452,830.00	
	Replanting Rubber () year)	36,210,794.00	
	ropannag nasos (/ Joan /	74,663.624.00	
4	Inventory		21,496,400.00
	Closing Inventory for Fertilizer to use rubber planting pr	oject.	
5	Preliminary Expenses		1,028,000.00
	Preliminary Expenses for Rubber Planting Project.		
6	Deposit		2,627,746,880.00
	Deposit for Rental Of Thahtone	1,200,000.00	
	Receivable - PG Deposit (US\$ 2,643.335.60)	2,626,546,880.00	
		2,627,746,880.00	
7	Receivable		82,129,930.00
	Receivable for Rubber Planting Expenses	60,633,530.00	
	Receivable for Fertilizer Sales	21,496,400.00	
		82,129,930.00	
8	Advance Payment		521.942,476.00
	Advance Income Tax (2012-2013) FY	200,000.00	
	Advance Commercial Tax (2012-2013) FY	200.000.00	
	Advance Commercial Tax (2012-2013) FY	6.493,926.00	
	Advance Income tax on Fixed Assets Purchase(13-14)	9,201,218.00	
	Advance Income tax for Import - Custom	202,798,932.00	
	Withholding tax for Construction Income	218,488,580.00	
	Withholding tax for Vehicle Sales	37.809.219.00	
	Advance Income tax for Truck Crane fixed assets	10.762.015.00	
	Advance Payment for shop rental (21) Months	31,500,000,00	
	Advance Pay for Replanting Rubber	4.488.586.00	
		521,942,476.00	

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9	Cash at Bank		346,577,072.5
	Cash at Bank (MFTB US\$ 329,042.45)	345,494,572.50	
	Cash at Bank (MICB US\$ 100)	82,500.00	
	Cash at Bank (NPT - Kyats)	1,000,000.00	
	Pauli Closing Balance of at 31.2.2018 une found to be	346,577,072,50	ŭ
	Bank Closing Balance as at 31.3.2015 was found to be c	correct by Bank Pass Boo	К.
0	Cash in Hand - Rubber Project		5,767,132.0
	Rubber office Cash Balance	1,106,952.00	
	Estate Cash Balance	4,660,180.00	
	Amount of the second	5,767,132.00	
	Cash in Hand		7,164,144,587.1
	Physical cash balance as at 31.3.2015 was approved by B	1.O.D	
2	Authorized Capital		500,000,000.0
	(50000 shares @ 10000 Ks)		
3	Issued & Paid up Capital		5,100.000.0
	(510 Shares @ 10,000 Ks)		
			1.104 150 707 5
ł	Retained Earning Account		1,195,450,787.5
	Details are shown in Sch (8).		
5	Provision for Commercial tax		17,019,585.0
	Prov; for Commercial tax of (2012-2013) FY's sales.	8,910,181.00	
	Prov: for Commercial tax of (2013-2014) FY's sales.	2,395,119.00	
		11,305.300.00	
5	Payable		10,222,636,155.9
	Payable for (2014-2015) financial year's audit fee.	3,000,000.00	
	Payable for Import Purchase with TT Payment(12-13)	101,444,994.00	
	Payable for Import Purchase with TT Payment(13-14)	315,201,500.00	
	Payable for Import Purchase with TT Payment(14-15)	8,479,164,950.00	
	Payable for Import Purchase with TT Payment(14-15)	254,718,000.00	
	Payable to MCM Pacific Pre (US\$ 1.041,508.05)	1.041.508.500.00	
	Payable for Rubber Planting Project in Sch-6.1	27.598.211.98	
		10.222,636,155.98	
7	Revenue		21,830,517,532.0
	Relevant Documents for Operating Income were present	ed by B.O.D but some in	come were
	provided by credit vouchers only.		
8	Operating Expenses		20,470,645,025.6
	Relevant Vouchers for Operating Expenses were presented	ed by B.O.D but some ex	penses
	were provided by debit vouchers only.		
9	Administrative Expenses		178,230,834.0
	Relevant Vouchers for Operating Expenses were presented	ed by B O D but some ex	nenses



Business License

(Duplicate)

2-1

Unified Social Credit Code: 913702121654224203

Name	SEPCOIII Electric Power Construction Co., Ltd.
Туре	Limited Liability Company (sole proprietorship of legal person and not non-natural person investment or holding)
Address	No. 882-1 Tong'an Road, Laoshan District, Qingdao
Legal representative	Wang Lujun
Registered capital	1,270,000,000 RMB
Date of establishment	August 21 st , 1991
Term of operation	August 21 st , 1991 to
Scope of business	General freight (the operation activities are carried out according to the Roa

Scope of business General freight (the operation activities are carried out according to the Road Transportation Operation Permit issued by the Transport Sector), super level general contracting of power engineering construction, Level II general contracting of building construction engineering construction, Level III general contracting of municipal public engineering construction, Level I specialized contracting of environmental engineering, Level III general contracting of petrochemical engineering construction, Level II specialized contracting of fire-fighting facilities engineering, Level A for engineering design in power industry, installation and improvement of boiler (Level 1), installation of pressure pipe, installation and maintenance of hoisting machinery, equipment supervision, installation (maintenance and testing) of power facilities: Level 1 qualification for installation, maintenance and testing, contracting overseas thermal power engineering and domestic international bidding engineering, export of equipment and materials required by above overseas engineering, foreign dispatch of labor required by implementing above overseas engineering, self-management of agency of imports and exports of various commodities and technologies (not allowed to operate items forbidden by laws, regulations and rules, and operate items limited by laws, regulations and rules after obtained the permit), and design and consult of electric power engineering, building, railway, highway and bridge engineering. (The item as mentioned above needing a permit shall be operated after the permit is obtained).

Registration Authority

Market Supervision Administration of Laoshan District, Qingdao

December27th, 2017

Website for enterprise credit information publicity system:

Supervised by State Administration for Industry & Commerce of the People's Republic of China

http://sdxy.gov.cn

企业名称变更核准通知书

(魯)名称变核内字[2017]第009529号

山东电力建设第三工程公司:

你局送审的 企业名称变更登记材料收悉, 经审查, 核准该企业名称变 更为: 山东电力建设第三工程有限公司

(行业:电力、热力、燃气及水生产和供应业|D 代码:火力发电 |4411)。

申请的经营范围:

普通货运(依据交通部门核发的《道路运输经营许可证》开展经营活动),电力工程施工总承包一级,房屋建筑工程施工总承包三级,市政公用工程施工总承包三级,环保工程专业承包一级,管道工程专业承包三级,消防设施工程专业承包三级,火电建筑安装施工(一级):30层以 下、30米跨度以下的房屋建筑、高度100米以下的构筑物的建筑施工,起、重机械施工,升降机安装及维修,水利水电施工二级和建设装饰三级,承 电境外火电工程和境内国际招标工程,上述境外工程所需的设备、材料出口,对外派遭实施上述境外工程所需的劳务人员,自营和代理各类商品及技术的进出口业务(法律行政法规禁止类项目不得经营,法律行政法规限制类项目许可后经营),电力工程、建筑、铁路、公路桥梁工程项目设计、咨询。(以上范围需经许可经营的,须凭许可证经营). 同时核准以该企业为核心企业组建的企业集团名称为: 以上名称在企业登记机关核准变更登记,换发营业执照后生效。



注:1. 名称变更扬准的有效期为6个月,有效期满,核准的名称自动失效。

- 企业名称涉及法律、行政法规规定必须报经审批项目,未能提交审批文件的,登 记机关不得以本通知书的企业名称登记。
- 3、企业变更登记时,登记机关应当将本通知书存入企业档案。
- 4、企业暨记机关应在核准企业变更登记。企业集团设立(变更)登记之日起30日 内,将加藤暨记机关印章的《企业名称变更被准登记回执》及该企业营业执照复印件报送企业名称标准机关备案。企业应当在企业变更要记之日起30日内将加盟公理的企业营业执赋复印件报送企业名称核准机关备案。未报送备案的,名称核准机关在有效期满三个月后将该名称作为未登记的名称处理。

Enterprise Name Change Approval Notice

(Lu) MCBHNZ [2017] No. 009529

SEPCOIII Electric Power Construction Corporation:

The registration material of the company name change has been received. After examination, it is allowed to change the name of this enterprise to: **SEPCOIII Electric Power Construction Co., Ltd.**

(Industry: production and supply of power, thermal power, gas and water) [D Code: **HLFD**] 4411).

Applied business scope:

General freight (the operation activities are carried out according to the Road Transportation Operation Permit issued by the Transport Sector), Level I general contracting of power engineering construction, Level III general contracting of building construction engineering construction, Level III general contracting of municipal public engineering construction, Level I specialized contracting of environmental engineering, Level III specialized contracting of pipeline engineering, Level III specialized contracting of fire-fighting facilities engineering, construction and installation of thermal power building (Level I): construction of house buildings under 30 floors and 30 meters span and structures under 100 meters high, construction of hoisting machinery, installation and maintenance of lift, Level II water conservancy and hydropower construction and Level III construction decoration, contracting overseas thermal power engineering and domestic international bidding engineering, export of equipment and materials required by above overseas engineering, foreign dispatch of labor required by implementing above overseas engineering, self-management of agency of imports and exports of various commodities and technologies (not allowed to operate items forbidden by laws, regulations and rules, and operate items limited by laws, regulations and rules after obtained the permit), and design and consult of electric power engineering, building, railway, highway and bridge engineering. (The item as mentioned above needing a permit shall be operated after the permit is obtained).

Furthermore, it is allowed that the Group established with this enterprise as the core enterprise uses the following name:

The above mentioned name shall take into effect upon the issuing of business license after the change of registration is examined and approved by the enterprise registration authority.

State Administration Bureau for Industry and Commerce, Qingdao Seal for Enterprise Name registration management (12)

October 27th, 2017

Notes:

- 1. The period of validity for an enterprise name approved by this Notice shall be six months and will be cease to be valid automatically at the expiry of the period of validity.
- 2. Where the name of the enterprise to be established involves the provisions of laws

and administrative regulations under which a report for examination and approval must be made and the document of the examination and approval cannot be submitted, the registration organ shall not register the enterprise name approved in this Notice.

- 3. If the enterprise changes the registration, the registration organ shall record this Notice in the enterprise file.
- 4. Within 30 days from the approval of the enterprise change registration and enterprise group establishment (change) registration, the registration organ shall submit the Receipt of Enterprise Name Change Approval Registration affixed with the seal of the registration organ and copies of the business license of the enterprise to the enterprise name approval authority for filing. Within 30 days from the day of the enterprise change registration, the enterprise shall submit the copies (with company seal) of Enterprise Business License to the enterprise name approval authority for filing. If such materials are not submitted for filing, the enterprise name approval authority will treat this name as an unregistered name after three months from the expiration of the period of validity.



中华人民共和国山东省青岛市市中公证处

.

山东电力建设第三工程公司章程

第一章总 则

第一条为适应发展社会主义市场经济,规范企业的组织和行为。依据《中华人臣共和国 全民所有制工业企业法》、《中华人民共利国企业法人登记管理委判》及其他有关规定,制定 本意程。

第二条本企业名称:

中文:山东电力建设第三工程公司(以下称"企业")

英文: SEPCONI ELECTRIC POWER CONSTRUCTIONG CORPORATION (SEPCON)



盈亏的法人实体。

關大集中国共产党基层组织在企业中的活动。按照《中国共产党章程》进行,企业发展 织发排政治核心作用,保证,监督党和国家方针政策在企业内资期执行。

第七奏企业依法建立工会组织, 开粮工会活动, 企业为工会提供必要的活动条件, 企业 通过职工代表大会和其他形式, 实行改主管理, 企业保护职工的合法积益, 加强劳动保护, 提高职工账质。

算二章企业的影音范围和经营方式

第八条经营范围;

许可经营调言; 普通查运

一般發雪項目,电力工程施工品承担一級,房厚書加工理理工品承包三級,市政公用工 程施工三級,环保工程专业承包一级,管道工程专业承包三级,消防设施工程专业承包三级, 火电虚筑安装给工(一级); 30 程以下, 30 米器理以下的房屋建筑,高度 100 米以干的构筑 物肉建筑海工,起型机械施工,升择机安耻及维导,水利水电施工工都和建筑装饰三级,豪 包袱外火电工程和城内如尿组标工程,上达变外工程所需的设备,时样出口,对外接近资源 上述当外工程的需的劳务人员,目言和代理各类商品及技术的是口业务(法律行或法规情比 类项目不得起常,法律行政法规原则类项目许可后经管)。

经增范围以审批机关和登记机关核性的范围为治,积弱需要,可依法变更, 重九条企业的经营周围为;长期,

第三章组织机构

第十条投资者行注下有职议

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(一) 任凭企业法定代表人)

(二) 軍奴批准企业的承担;

(三)軍貸借準定业的利润分配方案每家补亏损方案;

(四)对企业项加项减少注册资本作出决议;

(五)审议企业转任用资和办理财产转售手续;

(六)对企业出合件,分立,解散。破产和清算作出出设。

(七)对企业的财产实施服营管理。

第十一条企业设总经证1人,副总经电行干人,而感需要设计1年序、#会计师及其他 高级管理人员。

企业党委、纪委、工会组织机构和领导人员按照《中国共产党章程》:4.1.4233 而有关 建定办理。

第十二条总经理是企业法定代表人,由投资者任命。朝总经理由总经理提名,投资者任 合。

窗中三番岛越进行住下刑职权:

行<u>你企业</u>还定代表人职权。对外代表企业,签害企业文件,按照国家法律法规规率和上 级机关的规定行使活作职权和普温职权。

(→)决定免疫的后营计划。

(二) 耐定益业的年度财务预算方案洗算方案;

(三)制印金化的利润分配力素和盛补亏损方案;

(四) 創造企业增加成者减少注册资本方案;

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(五) 报定企业合并、分立、交更、解散方案;

(六)决定企业内部管理机构的设置:

(七) 聘任、解聘企业中层核导干部:

(八)主持企业经营宣言工作。

唐胡章职工和职工代爱大会

第十回杀职工学有结律规定的权利和义务。

第十五条职工应当以回家主入翁的态度从半劳动。 进守劳物纪律和需常新度,完成生产 和工作任务。

第十六条职工代表大会是企业实行把主管理的基本形式,是职工行使民主管理权利的机构。

第十七条职工代表大会按照《全民历有加工业企业职工代表大会条例》行业职权。

領五章制务管理制度

斯十八条企业依照国家法律、法规和有关部门的规定建立财务会计制度,通供各种税、 管、基金。

第十九条企业建立统一的财务管理体制,实行统一的财务管理办法,企业遵守财务制度 加强财务纪律。

(一) 做好成本核算与成本管理的各项基础工作,正确核算成本费用,合理计费指定管 产折旧,按规定预递和推销费用,计通和处理资产研究。

(二) 开脱目标成本管理。

(三)加强资金的监督和控制,建立全面预算管理相宜,编保财务会计报告其实、完整, 建立健全财务报表内部管理制度。

(四)加强附务审计。

第二十条企业采用借价记载法记账。本位而为人民币。

第二十一条企业会计年度采用公历年档,自公历审年1月1日至13月31日为一个会计 年度。

第二十二条企业设置内部审计机性。对企业能行可能该示动进行内部审计、监督。

第二十三条企业依法进行税务登记, 遂纳各项税款。

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第六章崇动用工制度

第二十四年本企业劳动用主执行国家加工原承位有关政策规范,在抵押结定表面内,采 政府会本企业实际项目上承受。

第二十五条水企业当端抵劳分配原始,实行专用系得纳分型制度,

他二十大条本全出现工的劳动保护、强疗、养龙间除带往国家担定办理。

調七當將止用請算

第二十七条企业的记储还能力不需需做判断情务的。信运官告跋产。

第二十八县小业有下到情况之一着。而当时胜江

(~~) 置主产置专用。无力供错经证书:

(二) 首不可以方向遗址产着损失, 无结形快经营者;

(三) 因亦许成分么需解释的。

上述任何一并漂忍其生后。现极经经营者出生解散。

第二十九歲全形成产温原放时, 急促应强出肉薄裹赤、草剂、并很立而非机强, 惟非法

你。他就就定程序,不准进行很佳。

清算結束靜, 消算机構造器的信言指計相說覺者積以, 并有甚登记机关办进往制是记率

谱, 禁回算业机器。出卷,

1.5

用八非常有的排动。订立和住款

第三十条企业草程修改,应该上该由评单位规划后, 无途程行或由于企业产业专用,反力建业经常,准。

本書程自工具行用管理机关推准是记之日起在

章程修正案

依据山东电力建设第三工程公司章程纬改规定,经本企业党政 原席会议决议,对本公司章程作如下修改;

德二条;英文名称修改为;

英文: SEPCOILI ELECTRIC POWER CONSTRUCTION CORPORATION (SEPCOIL)

第八条:经营范围修改为:

许可经营项目: 普通货运

一般经营项目:电力工程施工总承包一级,房屋建筑工程施工 总承包三级,市政公用工程施工三级,环保工程专业承包一级,管理 工程专业承包三级,消防设施工程专业承包三级,火电建筑安装施工 (一级):30 层以下、30 米跨度以下的房屋建筑、高度 100 米以下的 构筑物的建筑施工,起重机械施工,升降机安装及推修,本利水电施 工二级和建设装饰三级,承包境外火电工程和境内国际指标工程,上 述境外工程所需的设备、材料出口,对外派遣实施上述境外工程所需 的劳务人员,自营和代理各类商品及技术的进口业务,电力、超负、 铁路、公路、桥梁工程项目的咨询、设计。(法律行政法规基止类项 目不得经营,法律行政法规限制类项目许可后经营)。

经营范围以审批机关和登记机关核准的带侧为准设 根据需要, 可依法变更。





2

章程修正案

依据《公司法》、《公司登记管理条例》和<u>一条</u>个力建有限公司章程修改规定,经本公司股东会研究决定,对本公司章程作如下修改:

第 条:公司注册资本修改为<u>/22000</u>万元; 公司实收资本修改为<u>/22000</u>万元;

第 条:股东修改为:



公证书

(2017)青市中证字第 027235 号

申请人:山东电力建设第三工程公司,住所:青岛市崂 山区同安路882-1号。

法定代表人: 王鲁军, 男, 一九六三年九月十七日出生, 公民身份号码: 370112196309179910。

公证事项:复印件与原件相符

兹证明前面的复印件与青岛市崂山区市场监督管理局 登记备案的《山东电力建设第三工程公司章程》相符。

中华人民共和国山东省青岛市市中公证处

公证员 🔐



学供出 注意 计设计

ARTICLES OF ASSOCIATION

OF

SEPCOIII ELECTRIC POWER CONSTRUCTION CORPORATION

CHAPTER 1 GENERAL

ARTICLE 1 For the purpose of adaption to developing socialist market economy and regulating enterprise organization and behavior, these ARTICLES OF ASSOCIATION is hereby formulated in accordance with *the Law of the People's Republic of China of Industrial Enterprises Owned by the Whole People, the Administrative Regulations of the People's Republic of China Governing Registration of Legal Corporations* as well as other provisions.

ARTICLE 2 Name of the Enterprise:

Chinese Name: 山东电力建设第三工程公司(hereinafter referred to as "Enterprise")

English Name: SEPCOIII ELECTRIC POWER CONSTRUCTION CORPORATION (hereinafter referred to as "SEPCOIII")

Address: 882-1, Tong'an Road, Laoshan District, Qingdao City, Shandong Province 266100

ARTICLE 3 This Enterprise is an enterprise owned by the whole people, established with the investment of POWER CONSTRUCTION CORPORATION OF CHINA (hereinafter referred to as "the Investor").

ARTICLE 4 This Enterprise's registered capital is RMB four hundred and seventy million only.

ARTICLE 5 This Enterprise is registered by law with qualification of Legal Corporation. This Enterprise is a legal entity for autonomous operation, independent accounting and assuming sole responsibility for profit and loss by operation of law.

ARTICLE 6 The activity of CCP grass-roots organizations in this Enterprise shall be carried out in accordance with *the Constitution of the Communist Party of China*. This Enterprise's party organization shall act as the political nucleus to ensure and

supervise implementation of party and state policies in this Enterprise.

ARTICLE 7 This Enterprise establishes a Trade Union to carry out relevant activities and provide necessary conditions for such activities. This Enterprise implements democratic management through congress of workers and staff and other forms. This Enterprise safeguards staff legal right, strengthen occupational protection and improve staff quality.

CHAPTER 2 BUSINESS SCOPE AND OPERATION METHOD

ARTICLE 8 Business Scope:

Licensed Operation Items: Ordinary cargo delivery

Common Operation Items: First-grade EPC for electric power project, third-grade contractor for civil construction, third-grade contractor for Municipal Utilities Project, first-grade for environmental engineering project, third-grade contractor for pipeline project, third-grade contractor for fire-fighting engineering project, thermal power plant construction installment and erection (first-grade), construction for building under 30 floors and within 30 meters wide, construction for structure below 100 meters high, installation for hoist equipment, installation and maintenances for lifting equipment, second-grade construction and third-grade fitment for water conservancy electric power plant, contractor for overseas thermal electric power plant and international project, facility and materials export for overseas projects above, personnel sent to overseas for projects above, various kinds of products and technology import and export for self-operation and surrogating general material delivery (those items, which are prohibited by administrative laws and regulations, may not be operated, and which are limited, shall be operated after getting a license). The business scope shall be subject by the scope approved by approval authority and registration authority, and can be legally altered if necessary.

ARTICLE 9 Operation Term: Long-Term

CHAPTER 3 ORGANIZATIONAL STRUCTURE

ARTICLE 10 The Investor shall exercise the following powers:

(1) To appoint and dismiss the legal representative of this Enterprise;

(2) To review and approve these Articles of Association;

(3) To review and approve profit distribution and loss coverage plan of this Enterprise;

(4) To decide the increase or decrease of registered capital of this Enterprise;

(5) To review contribution transfer and go through assets transfer formalities for this Enterprise;

(6) To decide merger, division, dissolution, bankrupt and liquidation of this Enterprise;

(7) To supervise and manage assets of this Enterprise;

ARTICLE 11 This Enterprise shall establish one General Manager, several deputy general managers, Chief Engineer, Chief Accountant and other senior officers as required.

The Party Committee, Discipline Inspection Commission, Trade Union and leaders of this Enterprise shall be established in accordance with *the Constitution of the Communist Party of China, the Trade Union Law* as well as other regulations.

ARTICLE 12 The General Manager, appointed by the Investor, is the Legal Representative of this Enterprise. The deputy general mangers shall be nominated by the General Manager and appointed by the Investor.

ARTICLE 13 The General Manager shall exercise the following powers:

To exercise the power as the Legal Representative and sign legal instruments for and on behalf of this Enterprise, exercise the legal and managerial power in accordance with national laws and regulations and superior authority.

(1) To decide the operation plan of this Enterprise;

(2) To formulate annual financial budget and final settlement plan;

(3) To formulate profit distribution and loss coverage plan of this Enterprise;

(4) To formulate registered-capital increase or decrease plan of this Enterprise;

(5) To prepare merger, division, alteration and dissolution plan of this Enterprise;

(6) To decide on establishment of internal managerial organization;

(7) To appoint and dismiss middle-rank leadership of this Enterprise;

(8) To preside over operation and management affairs of this Enterprise.

CHAPTER 4 THE STAFF AND CONGRESS OF WORKERS AND STAFF

ARTICLE 14 The staff members shall have statutory rights and obligations.

ARTICLE 15 The staff shall work with the attitude as a state master, abide by labor discipline and regulations, and accomplish their assignment in production and work.

ARTICLE 16 The Congress of Workers and Staff is the basic form of this Enterprise for democratic administration and the institution for the staff in execution of power.

ARTICLE 17 The Congress of Workers and Staff shall perform its power and functions in accordance to *the Regulations of Industrial Enterprises Owned by the Whole People on Congress of Workers and Staff.*

CHAPTER 5 FINANCIAL MANAGEMENT SYSTEM

ARTICLE 18 This Enterprise shall establish financial and accounting system and make payment of all taxes, fees and funds in accordance with the national laws and regulations or provisions made by competent authorities.

ARTICLE 19 This Enterprise shall establish a unified financial management system, and follow unified financial management measures. This Enterprise shall abide by financial regulations and reinforce financial discipline.

(1) Doing well in all basic works such as cost accounting and management, making correct accounting of cost, making reasonable provision on depreciation of fixed assets, withholding and amortizing expenses as required, and making provision and disposing capital loss.

(2) Conducting targeted cost management.

(3) Strengthening capital supervision and control, building comprehensive budget management system, and ensuring authenticity and integrity of financial and accounting reports, building an integrated internal management system of financial statements.

(4) Strengthening financial audit.

ARTICLE 20 This Enterprise shall apply debit-credit bookkeeping method and

standard currency is RMB.

ARTICLE 21 The fiscal year of this Enterprise shall be Gregorian calendar, and the fiscal year of this Enterprise is from January 1 to December 31 of each calendar year.

ARTICLE 22 This Enterprise shall set an internal auditing institution to conduct internal auditing and supervision on enterprise accounts and economic activities.

ARTICLE 23 This Enterprise shall go through registration with taxation authorities and pay all duties or taxes by law.

CHAPTER 6 LABOR EMPLOYMENT SYSTEM

ARTICLE 24 This Enterprise shall employ labors in accordance with the state laws and regulations as well as policies made by parent company, and use employment form in compliance with the actual situation of this Enterprise.

ARTICLE 25 This Enterprise shall follow the principle of distribution based on work performance and conduct such distribution system of more pay for more work.

ARTICLE 26 This Enterprise shall deal with labor protection, health insurance and endowment insurance in accordance with the national regulations.

CHAPTER 7 TERMINATION AND LIQUIDATION

ARTICLE 27 This Enterprise shall be declared bankrupt by law in case of insolvency or incapability in service of matured debt.

ARTICLE 28 This Enterprise shall declare dissolution upon any one of the following circumstances:

(1) Heavy loss leading to failure to continue operation;

(2) Heavy loss arising from force majeure and leading to failure to continue operation;

(3) Being dissolved for merger or division.

Any one of the above circumstances should be reported to the Investor for approval of dissolution.

ARTICLE 29 This Enterprise should propose liquidation procedures and principles, and establish a liquidation institution for the purpose of liquidation in compliance

with law and regulations.

Upon completion of liquidation, the institution shall make a liquidation report, which shall be submitted to the Investor for confirmation, and then this Enterprise shall apply to the registrar for cancellation and return business license and company seal.

CHAPTER 8 AMENDMENTS, FORMATION AND VALIDITY OF THESE ARTICLES OF ASSOCIATION

ARTICLE 30 The amendment to these Articles of Association should become valid only with the approval from superior authorities in charge. These Articles of Association shall be cancelled with the approval from superior authorities in case of force majeure leading to unenforceability of these Articles of Association or heavy loss leading to failure to continue operation.

ARTICLE 31 The national laws and regulations or policies shall prevail in case of any conflict with these Articles of Association, and those approved by registration authority shall prevail in case that the registration proceedings for corporation are involved.

These Articles of Association shall come into force as of the date of approval for registration by the Administration for Industry and Commerce.

SEPCOIII Electric Power Construction Corporation

Amendment for ARTICLES OF ASSOCIATION

On the basis of the Articles of Association modification rules of SEPCOIII Electric Power Construction Corporation, The party and the association results to make the following modification for the Articles of Association:

Item 2: the English name changed to: English name: SEPCOIII Electric Power Construction Corporation (SEPCOIII)

Item 8: Business Scope changed to:

Licensed Operation Items: Ordinary cargo delivery

Common Operation Items: First-grade EPC for electric power project, third-grade contractor for civil construction, third-grade contractor for Municipal Utilities Project, first-grade for environmental engineering project, third-grade contractor for pipeline project, third-grade contractor for fire-fighting engineering project, thermal power plant construction installment and erection (first-grade), construction for building under 30 floors and within 30 meters wide, construction for structure below 100 meters high, installation for hoist equipment, installation and maintenances for lifting equipment, second-grade construction and third-grade fitment for water conservancy electric power plant, contractor for overseas thermal electric power plant and international project, facility and materials export for overseas projects above, personnel sent to overseas for projects above, various kinds of products and technology import and export for self-operation and surrogating general material delivery. Consulting and engineering work for power project, architecture, railway, road and bridge engineering work. (Those items, which are prohibited by administrative laws and regulations, may not be operated, and which are limited, shall be operated after getting a license).

The business scope shall be subject by the scope approved by approval authority and

registration authority, and can be legally altered if necessary.

Legal Representative:

Seal:

Wang Lujun

Date:

Amendment for ARTICLES OF ASSOCIATION

On the basis of Company Law, Registration of Companies Ordinance and the Articles of Association modification rules of SEPCOIII Electric Power Construction Corporation, Board of Shareholders made the following modification for the Articles of Association:

Item__: the English name changed to: _____ limited company; Item__: location changed to: Room No.__, No.__, Road, Laoshan District, Qingdao

Item___: business Scope changed to:

Item___: registered capital changed to 1,270,000,000 Yuan; paid-in capital changed to 1,270,000,000 Yuan

Item __: shareholder changed to: Power Construction Corporation of China

amount of investment: 1,270,000,000 Yuan

way of investment: currency

time of investment: Oct 18th, 2017

Item __: business term changed to: __year __month__day

Legal Representative:

Seal: SEPCOIII Electric Power Construction Corporation

Wang Lujun

Date: 20th Nov, 2017

NOTARIAL CERTIFICATE

(2017)QD.Shi Zhong Zi, No.027235

Applicant: SEPCOIII Electric Power Construction Corporation, Address: No.882-1, Tong'an Road, Laoshan District, Qingdao City.

Legal Representative: Wang Lujun, male, born on September 17, 1963, Citizen ID No.370112196309179910.

Issue under notarization: True and Exact Copy

This is to certify that the duplicate copy attached hereto is in conformity with the original copy of SEPCOIII Electric Power Construction Corporation's Articles of Association registered and filed at Market Supervision Administration of Laoshan District, Qingdao.

> Notary: Liu Na Qingdao Shizhong Notary Public Office Shandong Province The People's Republic of China December 6, 2017



中华人民共和国山东省青岛市市中公证处



公证书

(2017) 青市中证字第 027234 号

申请人:山东电力建设第三工程公司,住所:青岛市崂 山区同安路882-1号。

法定代表人: 王鲁军, 男, 一九六三年九月十七日出生, 公民身份号码: 370112196309179910。

公证事项: 复印件与原件相符

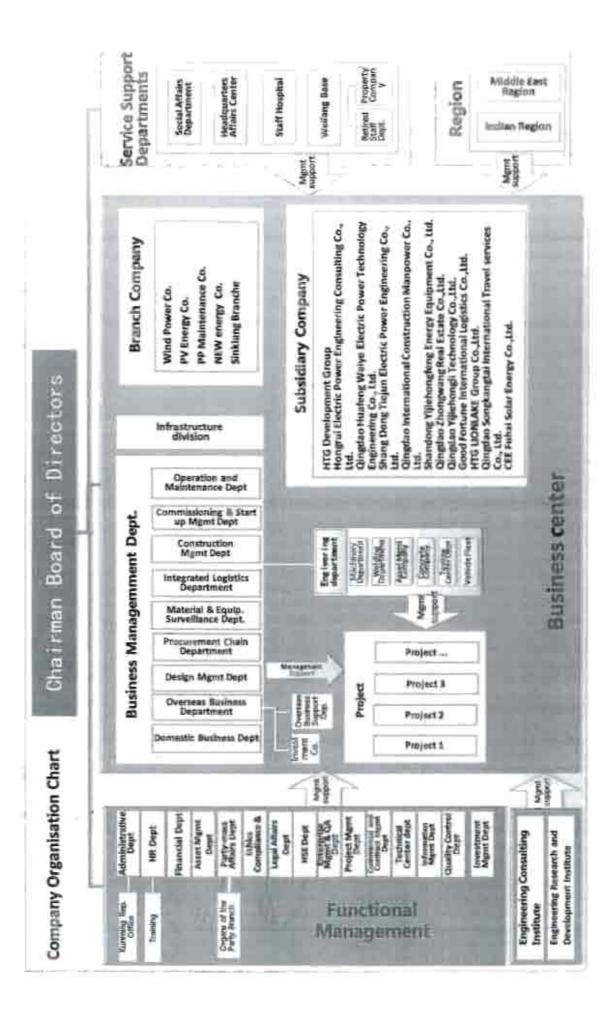
兹证明前面的复印件与山东电力建设第三工程公司的 《公司组织机构图》原件相符。

中华人民共和国山东省青岛市市中公证处

公证员 之 87



(加州) 오랍니



NOTARIAL CERTIFICATE

(2017)QD.Shi Zhong Zi, No.027234

Applicant: SEPCOIII Electric Power Construction Corporation, Address: No.882-1, Tong'an Road, Laoshan District, Qingdao City.

Legal Representative: Wang Lujun, male, born on September 17, 1963, Citizen ID No.370112196309179910.

Issue under notarization: True and Exact Copy

This is to certify that the duplicate copy attached hereto is in conformity with the original copy of SEPCOIII Electric Power Construction Corporation's Company Organization Chart.

> Notary: Liu Na Qingdao Shizhong Notary Public Office Shandong Province The People's Republic of China December 6, 2017

SEPCOIII ELECTRIC POWER CONSTRUCTION CORPORATION

AUDITORS'REPORT

2016



中天运会计师事务所(特殊普通合伙)

JONTEN CERTIFIED PUBLIC ACCOUNTANTS

Contents

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AUDITORS'REPORT

Jonton [2017] Auditing No.01677

To SEPCOIII Electric Power Construction Corporation:

We have audited the attached financial statements of SEPCO III Electric Power Construction Corporation(the company),which comprise the balance sheet as at 31 December of 2016, and the income statement, the cash flow statement and the statement of changes in owners 'equity of the year for the year then ended.

Management Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements. The responsibility includes (1) preparing financial statements in accordance with the provisions of Accounting Standards for Business enterprises and fairly presenting the financial statements; (2) devising, performing and maintaining a system of internal control sufficient to make sure the financial statements free from material misstatement, whether due to fraud or error;

Auditors 'Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Chinese Certified Public Accountants Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about amount and disclosures in the financial statements. The procedures selected depend on the auditor's judgments, including the assessment of the tisks of material misstatement of financial statements, whether due to fraud or error. In making those risks assessment, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the

entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and reasonableness of accounting estimates made by management as well as evaluating the overall presentation of the financial statements. We believe evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements give a true and fair view of financial position of SEPCO III Electric Power Construction Corporation as at 31 December of 2016, and of its financial performance and its cash flow for the year then ended in accordance with Chinese Accounting Standards for Business Enterprise and the Accounting System for Business Enterprises.

Jonten Certified Public Accountants Ltd Certified Public Accountant of China

Beijing, China

Certified Public Accountant of China

28 April 2017

BALANCE SHEET

Docember 31,2016

ed by SEPCOII Electric Power Construction corporation	Currency Unit - RME yuar	
Assets	91-Oni>10	31-Dec-15
Current Aasets		
Monetary analets	4.353.742.454.30	1,100,988,472,27
Trading financial assets		
Notas monetale	55,804,320.02	11,004.347.00
Appoints receivable	1.284.167,148.37	1,041,175,121,47
Advance to suppliers	1,928,850,416,89	743.572,654.70
Dividend receivable	19,134,072.57	2,651,482.06
Internet receivable	195,458,75	
Other moeivables	1,711,208,903,87	2.861,806,911,45
สารระบบสารสาร	1,734,566,594,79	2,815,670,049,85
Non-current assets due within one year	100,342.14	2,014,010.41
Other current assats	653.548.478.44	181,582.121.10
Sub-total of current susets	17,281,341,902.70	11,410,365,412,79
Non-current Assets		
Averiable for-sale financial assets	95,401,010,00	7.481.010.00
Hext-to-maturity love street.		
Long-term receivabling		
Lang-bern squily investment	934,798,889,62	930,368,275.87
Investment Property		
Net fixed assats	257.385.014.81	191,385,613,51
Construction III progress		
Construction Materials		
Disposal of firms waveful	1.001,733.93	1,5/3,783.85
Productive living assets		
Oil and gas access		
Intergibie assets.	55,235,859 14	11,742,010.12
Inc. Right to the use of land		
Development cost		
Goodwall		
Long-ferm prepaid respenses		102.343 14
Dylamod income tax patents	12.07.678.35	12,747,94870
Cither non-current aborts	300 304,122,14	106,077,022,00
Sub-total of non-current assets	5795.00\$20125	1,711,431,313,431
Total assets	11.002.474.421.30	13.241.717.048.81

BALANCE SHEET (Continued)

December 31,2016

Prepared by: SEPCOII Electric Power Construction corporation		Curr	ency Unit : RMB yuan
Liabilities and owners'cquity	Nate	31-Dec-18	31-Dec-15
Current Linkitties			
Short-term teans		380,005,000 00	
Trading financial liabilities			
Notes psyste		1,213,400,557.23	955,908,690,28
Accounts payable		4,853,458,434,35	3,415,860,193,22
Advance from clients		5,975,522,699.14	2.619,341,782.40
Satarine and welfare payable		60.609.251.76	\$0,598,063 12
Taxes payable		177,377,803,42	182,452,943,89
interests payable		53,604,165,85	10.325,000.00
Dreident payette		32,300,000,05	15,776,000.05
Other payables		825,817,011.63	491,497,548,52
Non-current Estillbes due within one year		1.194,040,250.00	389, 137, 560, 60
Other current labilities	_		
Sub-total of current liabilities	_	14.125.540,043.55	0.291,017,801,64
Non-current Lisb/Itilas			
Long-birm klano		1.894.000.000.00	2,499,630,200 \$0
Bonds payable		2.000.000.000.00	1,500,000,009 00
Long-term payable			
Special accounts payable			
Estimated tab/Alies			
Deterred accome tax liabilities			
Other non-current liabilities	~		
Sub-total of non-current liabilities		8,804,000,000,00	3,399,630,201.00
Total Habilities	_	17.019,340,043.55	13,201,296,051.64
Owners'equity			
Pask-in copical		470,000,000,00	470.089,009.00
Capital symptote		6.583,900.04	2,700,900.89
Approximation reserve			
Surplus reserve		103.822.103.55	36,115,885.44
vic: Statutory reserve		103.022.145.55	att:155.655.44
Other surplus receive			
Understruktel profit		802929.074.70	4812273.01.03
Excitionge differences on transisting toraign operations			
Total equility attributable to the shareholders of parent company			
Minority ahamhoklimi' inplaty	-		
Total owners' equity			10.45 288 387 11
the second second		1,102,103,075.25	1,049,488,387,17

INCOME STATEMENTS

Prepared by: SEPCOIII Electric Power Construction corporation	Currency Unit : RMB year	
tierns	2018	2015
1 Revenue	10.598,722,677.13	12,764,193,215.35
Inc. Revenue from main operations	10.597.639.658.26	(2,203,917,215.35
Revenue from other operational	1,083,018.87	275,000.00
Less		
Cast	9,896,418,829.95	11.862,932,370.72
inc Cost of main operations	9.896.418.929.95	11.667.922.408.92
Cost of other operations		9,961,80
Takes and surcharge	-38,894,154.87	97.329,386 17
Operating expenses		
General and administrative expenses	336,559,265,36	304.022.010.29
Financial expenses	282,855.7%4.75	196,047,942 71
Assets devaluation	-10.258.469.23	8,647,859 20
Ada		
The profit on the changes in fair value		
investment income	35,919,706.61	38,650,735.18
2. Operating profit	(74,570,077.86	253,864,378,54
Add:		
Non-operating revenue	3,776.158.35	7871,16151
Less		
Non-operating expenditure	1,431,166.34	441,770,92
3.income before tax	177,175,066.83	260.483.759.53
Leas		
Income tax	6,112,085,75	43,253,969.65
4.Net Income	177.042,861.08	217.225.345.08
Less		
Minority interest income:		
5.Net income attributable to owners of the parent company	171,002.381.38	217,298,542,60

CASH FLOW STATEMENTS

Presared by, SEPCOIII Electric Power Construction corporation	Curra	ney time RMB years
if some	30+1	2015
1. Cash flows from epotaling activities		
Cast received from the sale of gouts or renduring of anvious	17312-112.93534	6.525 th0 996.51
Refeats of lains	TTP ARE PRAIRE	180,966,905,4
Other stativities gruining to operating activities	3230.005844.18	1.6161013.862
Bub-total of cann inflows	30.888.004.073.17)	10,125,859,845.28
Cash paid its prodit and services	54-ACC/080-1-01-002	1.014.436.955.83
Cann paid to and on behall of employees	340.1345.9952.246	1996, 636, 900, 33
Payment of at typics of faces	125,785,535-41	PAXA03.495.59
Other cash sayments relating to operating equilities	33/0.006.607.19	IN ATLESE A
Sub-total of name outlows	99,441,022,13C.11	8.0/9,182,005.24
Net cash flows from operating activities	1,416,476,283,21	1/648/052,838 54
2. Cash titues from investing activities		
Careh recomment from disposal of investments	276.000.000.00	
Sash moelved from return or investments	28.2m2.5m2.8M	35.199.252.N
Cash received from disposal of substitutes or other business write		
Nel cash received from disprove of fixed assets intenditio assets and ther long-term ansats	414,285.74	261.951.51
Other cash received relating to investing milliview	26(546,402.**)	724,661.21
Sub-total of usak informs	120.754,297.36	36,305,881.94
Carly past to account fixed assets, strangible assets and other king aminasters	130,575,845,11	3355.95.9
Cath until to acquire meetine	12,435,412:05	100,000,000,000
Cash paid to disposal of subsidianes ar other ibusiness only		
Other cault payments relating to must ing activities	1921, \$46 6HB 92 "	788.377,871.93
Sub-lotel of cash sufficers	1,344,351,871,60	(136,463,847.9)
Net cash fines from breating activities	210,005,006,24	-806,157,582,94
E. Cash flows from financial activities		
Cash rectiond footh capital achity/bullion	1.983.000.09	1:556,001.0
Cash received from borrowing	1,970,926,675.03)	1.419.024,858.31
Cost received term second benefit	000-600000000	5.800.000.000.000.00
Other basis modified relating to the most work-likes	1190.000,000.00	TEX.000.00110
Sub-total of contributions	1,3/1,100,575.00	2,642,010,810,37
Gaun repayments of amounts between	1346,003,178,00	2,188,271,0182,21
Cash payment for distribution of dividends or prolits and for interest expenses	27.886.8.249	THE ROB SHIT
Other seak powerents milling to transist uptivities	058,003.00010	LM 2500
Sub-mitel of coath confirme	2,64,285,577.81	1.172,438,880.20
Retassin flows From Minancial activities	1001,8591,1127,555	264.260,124.17
V. Effect of changes in foreign exchange rate or sately	914 STR 14555	1410-000
V. Net loccease in cash and cosh aquivalents	1208.001.012.09	043,026,05429

STATEMENT OF CHANGES IN OWNERS'EQUITY

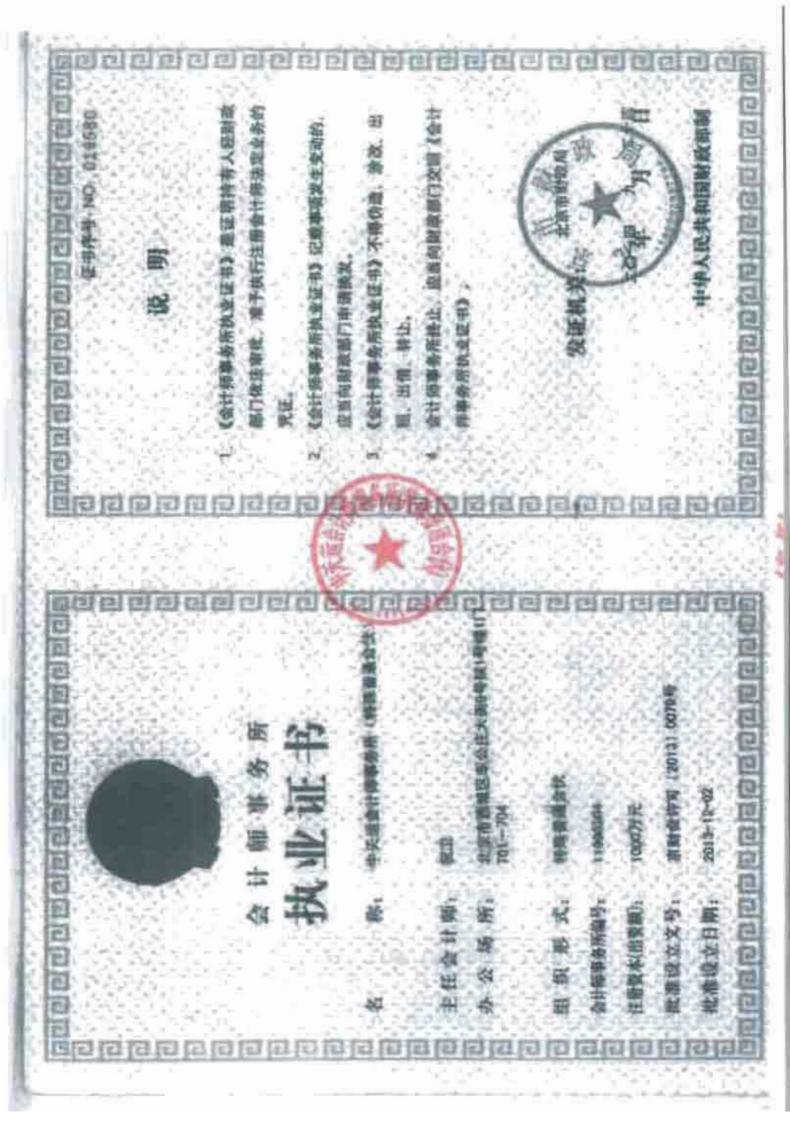
Prepared by: SEPCOIII Electric Power Construction corporation	Cun	ency Unit : RMB yoan
items	31-Dec-16	31-Dec-15
1. Pald-In capital (or stock)		
Beginning balance	470.000,000.00	470,000,000.00
kicrease in ourrent year		
Inc. owner's appropriation		
Intra transfer from capital reserve		
intra transfer from undistributed profit		
Enderg balance	470,008,090.00	470,000,000.00
II. Capital surplue		
Beginning tialance	2,700.000.00	1,200,000.00
increase in current year		
Inc: Investment from owners	3.603.000.00	
Stock payment counted as capital		
Others		1.500.000.00
Decrease in current year		
Inc. Intra transfer to capital (or stock)		
Ending balance	1.583,000,08	2,700,000.00
III. Appropriation reserve		
Beginning balance		
Increase in current year	80,219,055.23	103,304,654.04
that Security funds	80,215.053.23	105_3U4.8HA.04
Decrease in current year	80,219,055.23	103.304.064.04
Incluse of security funds	\$0,219,053.23	303.504,004.04

STATEMENT OF CHANGES IN OWNERS'EQUITY

Prepared by: SEPCCIII Electric Power Construction corporation	Cut	rency Unit RMB yuan
Items	31-Dec-16	21-Dec-15
IV. Surpius reserve		
Beginning balance	BH:51/1/365.44	64,791,890,45
Increase in current year	17,106,238.11	21.723 584 95
Inc: Amount appropriated from cel income	17.506.236.11	21 723 984 99
Inc: Statutory surplus reserva	17.506.728.11	21,723,964,06
Statutory weithre fund		
Investment from owners		
Reserve fund		
Enterprise development funct		
Decrease in current year		
inc. Recovery of losses		
Conversion into capital (or stock.)		
Investment out of owners		
Ending balance	181,622,183,68	86,515,885.ac
V. Undistributed profit		Contraction of the second seco
Undistributed profil at the beginning of your	481,273,131.73	308.557,265.84
Ado:		
Adjustment to beginning balance		
Adjusted undistributed profit at the beginning of year	481:273.131.73	308,667,266,84
Add:		
Net income(or losses)	171.062.381.08	217.236,849.88
Income from other adjusted issues.		
Less		
Profit appropriation	49,405,238.11	44.533.984.99
Inc. Statutory surplus reserve	17,405,238.11	21,723.584.59
Appropriation to owners	32,300,000,00	22,350,000,00
Others		
Lindistributed profit/losses at enit of year	602,929,274,70	481,273,131.73



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SEPCOIII ELECTRIC POWER CONSTRUCTION CORPORATION

AUDITORS'REPORT

2015

中天远会计师事务所(特殊普通合伙)

JONTEN CERTIFIED FUBLIC ACCOUNTANTS | LIMITED LIADULITY PARTHERED #

SEPCOIII ELECTRIC POWER CONSTRUCTION CORPORATION

AUDITORS'REPORT

2015



中天运会计师事务所(特殊普通合伙)

JONTEN CERTIFIED PUBLIC ACCOUNTANTS

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6. Copy of Business License of Accounting firm	

AUDITORS'REPORT

Jonten [2016] Auditing No. 01198

To SEPCOIII Electric Power Construction Corporation:

We have audited the attached financial statements of SEPCOIII Electric Power Construction Corporation(the company), which comprise the balance sheet as at 31 December of 2015, and the income statement, the cash flow statement and the statement of changes in owners 'equity of the year for the year then ended.

Management Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements. The responsibility includes (1) preparing financial statements in accordance with the provisions of Accounting Standards for Business enterprises and fairly presenting the financial statements; (2) devising, performing and maintaining a system of internal control sufficient to make sure the financial statements free from material misstatement, whether due to fraud or error;

Auditors 'Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Chinese Certified Public Accountants Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about amount and disclosures in the financial statements. The procedures selected depend on the auditor's judgments, including the assessment of the risks of material misstatement of financial statements, whether due to fraud or error. In making those risks assessment, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the

entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and reasonableness of accounting estimates made by management as well as evaluating the overall presentation of the financial statements. We believe evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements give a true and fair view of financial position of SEPCO III Electric Power Construction Corporation as at 31 December of 2015, and of its financial performance and its cash flow for the year then ended in accordance with Chinese Accounting Standards for Business Enterprise and the Accounting System for Business Enterprises.

Jonien Certified Public Accountants Ltd Certified Public Accountant of China

Beijing, China

Certified Public Accountant of China





18 March 2016



BALANCE SHEET

December 31,2015

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Prepared by: SEPCOIII Electric Power Construction corporation

Asats	31-Dec-15	31-Dec-14
Corrent Assets		
Monetary assets	3.100.988.472.27	3,514,383,139.47
Trieding Bnarcost issets		
Notes receivable	11/334.347 80	34,752,242.00
Accounts receivable	1,841.175,131.47	1,275,137,044.77
Advance to suppliers	743,572,854.70	660,673,526.28
Dividend receivable	2,651,462,38	
interest receivable		
Other receivables	2,951,606,911,45	\$1638.MQ.173.00
Invension	2.815.820.0411.85	2,948,870,188,42
Non-current assets due within one year	2.994/510.45	
Other current assess	181,502,171,36	111,550,310,15
Sub-total of current assets	11,450,265,432.29	11,203,585,621.72
Non-current Assets	-	
Available-for-sale financial assets	2,481,010,00	7,451,010.00
Held-to-maturity investment		
Long-term (ace vables		
Long-term equity investment	930,368,276,87	433,678,276.67
Investment Property		
Net fixed-assets	191,365,612,51	107.042.004.25
Construction in progress		
Construction Materials		
Disposal of fixed atsets	1372/15165	1.137 734 68
Productive living assets		
Oil and gas assets		
Intalgible assets	11,042,052,53	14,828,406,4
Inc Right to the use of land	(112) 240.41	4201.01221
Development cost		
Goodwill		
Long-term propaid expenses	100,542.14	1.676340.40
Deferred income tax ansets	12,747,928,71	25,084,714,33
Other non-barrent asses	630,6113,022,40	H44(24)(田(23)
Sub-total of non-current assets	1,791,451,819.53	1,315,250,342.46
Total assets	13,2/17/17,048.81	12.518.815.864.18

BALANCE SHEET (Continued)

December 31,2015

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Prepared by: SEPCOIII Electric Power Construction corporation

Liabilities and owners'equity	Note	31-Dec-15	31-Dec-14
Current Liabilities			
Short-term loans			1.519,174,900.43
Trading financial kabilities	4		
Notes payable		955,908,690.28	667,578,732.00
Accounts payable		3,415,940,193.22	2,816,036,640,35
Advance from clients		2,619,347,782.40	3,480,850,925.81
Salaries and welfare payable		50,698,093.12	39,057,107.5
Taxes payable		192,452,943.80	159.987,347.2
interests payable		40.826.000.00	
Dividend payable		\$5,776,000.06	14,440.000.0
Offer payables		45/1,457/548.82	368,186,066.7
Non-current liabilities due within one year		385.157.595.00	172,249,850.60
Other current habilities			
Sub-total of current liabilities		8,201,597,851,64	9,247,661,770.18
Non-current Liabilities	*		
Long-term loans		2,409,639,200.00	7,826,634,946.71
Bonds payable		1,300.091,003.00	200,000,000,000
Long-term payable			
Special accounts payable			
Extension turbilities			
Deferred income tax habilities			
Other non-current liabilities			
Sub-total of non-current liabilities		1,999,633,203.50	2,426,634,946.71
Total Babilities		12,201,228,001.64	11,074.296,716.89
Owners'equity			
Paid-In capital		471,600,000,60	676.000.000.00
Capital surplus		2,700,000,00	1,230,000,00
Appropriation reserve			
Surplus reserve		85.515.188.44	#4 701.180.45
inc. Statutory reserve		\$6.515,255.44	64,791,850.45
Other surplus reserves			
Undistributed profit		401.225.511.70	36.567.295.5
Exchange differences on traislating foreign, operations			
Total equity attributable to the anareholders of parent company			
Minority shareholders' equity			
Total owners' equity		1,040.488,997.17	314.559,147.29
Total liabilities and owners' equity		112412T7,MEST	12,518,855,884,18

INCOME STATEMENTS

2015

Items	2015	2014
1. Revenue	12,704,193,215.35	13.271,752,643.17
Inc. Revenue from main operations	12,703,917,215.35	13,267,904,911.34
Revenue from other operations	276,000.00	3,847,731,8
Less		
Cost	11,882,932,370.72	12,551,650,533,69
Inc:Cost of main operations	11,882,922,408.92	12,546,618,670.06
Cost of other operations	9,961.80	6,031,863.63
Taxes and surcharge	97,329,386 17	40,348,827.61
Operating expenses		
General and administrative expenses	304.022,010.25	410,958,580.90
Financial expenses	196.047,942.73	82 591 883.37
Assets devaluation	8,647.858.70	1,928,471,63
Add:		
The profit on the changes in fair value		
Investment income	38,650,735.16	57,035,549.48
2. Operating profit	253,864,378.94	241,309,915.45
Add		
Non-operating revenue	7,071,151.51	4,582.700.22
Less		
Non-operating expenditure	445,770.92	311.234 02
3 Income before tax	260.498,789-53	245.561.001.68
Less		
Income tax	43,253 909 68	70,453,237,86
4.Net income	217,239,549.88	175,108,143.79
Less		
Minority interest income		
5.Net income attributable to owners of the parent company	217,239,849.88	175,108,143.79

Prepared by: SEPCOIII Electric Power Construction corporation

CASH FLOW STATEMENTS

2015

Rema	2015	2014
1. Cash flows from operating activities		
Cash received from the sale of goods or rendering of services	8,520,350,990.52	7.170,550,089.16
Relouds of taxes	186,986,105.41	93,994,332,81
Other cash receipts relating to operating activities	1.818.513,849.27	3.285.278.902.53
Sub-total of cash inflows	10,525,850,945.20	10,549,823,324.50
Cash paid for goods and services	6,614,438,955,69	6,657,260,198.10
Cash paid to and on behalf of employees.	866,535,901,32	157,675,761 18
Payment of all types of taxed	745,603,400 10	385,656,237,11
Other cash payments relating to operating activities	859.663.659.05	5,353,816,859.02
Sub-total of cash outflows	9,076,182,005.66	13,254,411,055.41
Net cash flows from operating activities	1.449,568,939.54	-2,704,587,730.91
1. Cash flows from investing activities		
Cash received from disposal of investments		\$59,000,000.00
Cash received from return on investment	35,999,252.20	52,035,54%.44
Cash received from disposal of subsidiaries or other business units		
Not cash received from disposal of fixed assets intangible assets apd other long-term assets	281,991,51	1,288,149.15
Other cash received relating to investing activities	224.001.25	15.678.416.87
Sub-total of cash inflows	36,505,864.96	632,999,115.30
Cash paid to acquire fixed assets, intangible assets and other long- erm assets	53,595,976.98	50.789.533.01
Cash paid to acquire investments	496.686.008.00	
Cash paid to disposal of subsidiaries or other business units-		
Other cash payments relating to investing activities	298,377,879.92	862,059,03
Sub-total of cash outflows	836,663,847.90	51,651,592.84
Net cash flows from investing activities	-600,107,982.94	581,347.522.46
II. Cash flows from financial activities		
Cash received from capital contribution	1.500.000.00	1,200,000,00
Cash received from borrowing	1.463.024.868.37	3,449,454,783,44
Cash received from issuing bonds	1,000,000,000,00	500.000.000.00
Other cash received relating to financial activities	200,030,000,00	110.000.000.00
Sub-total of cash inflows	2,060,524,868.37	6,060,654,763.44
Cash repayments of amounts borrowed	2,188.316,885.51	4,727,874,333.74
Cash payment for distribution of dividends or profits and for inhumat expenses	183.996.081.11	174,929,961 16
Other cash payments relating to financial activities	(24,732.58	119,453,5311.57
Sub-total of cash outflows	2.372,438,680.29	4.942.257,833.47
Net cash flows from financial activities	286,065,168.17	1.118,396,929.97
IV. Effect of changes in foreign exchange rate on cash	5,523,049,05	18.258,530.40

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Prepared by: SEPCOIII Electric Power Construction corporation

V. Net increase in cash and cash equivalents

943,121,194.76

-986,583,748.08

STATEMENT OF CHANGES IN OWNERS'EQUITY

2015

Prepared by:	SEPCONT	Electric	Power Construction corporation	
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items	31-Dec-15	31-Dec-14
I . Paid-In capital (or stock)		
Beginning balance	470,000,000.00	470,000,000.00
Incrusive in coment year		
In::: owner's appropriation		
Intra transfer from-capital reserve		
Intra-transfer from undistributed profit		
Ending balance	470,000.000.00	470,000,000.00
II : Capital surplus		
Beginning balance	1,000,000,001	
Increase in current year		1,251,000.00
Inc. Investment from owners		
Stock payment counted an capital		
Others	1.500.080.05	1,206,005 int
Decrease in current year		
Ins: Intra transfer to capital (or stock)		
Ending balance	2,700,000,05	1.298,000.00
III. Appropriation reserve		
Beginning balance		
Increate in coment year	102304,651.04	
Inc:Security funds	100,304,564,94	
Decrease in current year	405.954,664,54	
Inc:Use of security lunds	\$115 334 564.04	
Enving balance		

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STATEMENT OF CHANGES IN OWNERS'EQUITY

2015

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Prepared by: SEPCOII Electric Power Construction corporation

Iteras	1	21-Dec-15	21.Dec.14
N Surplus receive			
Engineering balance		\$4.791,54E-45	41.381.986-37
Increase in current year		21,121,994,99	17.5元(814.3)
inc. Amount appropriated interinet income		21.723.984.99	17.540.914.38
ext: Statutory surgicul reserve		21.223384.99	17.514.BM 38
Statutory welfare fund			
Investment from Owners			
Reserve Lod			
Enlegitas development fulld			
Decrease in current year			
Inc. Recovery of Iceans			
Conversion into capital (pristock.)			
Knestment out of owners			
Endrig balance		85,513,805.44	\$4,791,880.45
V. Undistributed profit			
Undistributen profit at the beginning of year		308 567 286 84	157.029.937.43
Aat			
Adjustment to beginning balance			
Adjusted undisiributed profil at the beginning of year		336.547.386.84	157,020,907,43
Ado			
Nell income(oi losses)		217.232.849.96	175,108,143.79
bicome from other adjusted issues			
Lena			
Phulli appropriation		44,3371,984,29	215/0.014.38
Inc: Statutory surplus reserve		21.121.394.03	17.510.810.38
Appropriation to dwners		22,010,000,00	6,066,000,00
Others			
Undistributed prefit/losses at end of year		481,275,131,73	308.507.266.84

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要示,每年1月1日至6月30日通过全查信用信息会示希性 化结上一年世中宫课告并会示。

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