

Due Diligence Report

Project Number: 41924-014

18 January 2017

Nam Ngiep 1 Hydropower Project (Lao People's Democratic Republic)

Nabong Sub Station Upgrade

Prepared by Nam Ngiep 1 Power Company Limited for the Asian Development Bank

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I. Introduction

A. The Nam Ngiep 1 Hydropower Project

1. Nam Ngiep 1 Power Company (NNP1PC) was formed in 2006 as a partnership of three companies to develop, finance, construct, own and operate the Nam Ngiep 1 Hydropower Project (NNP1). The NNP1PC consists of Kansai Electric Power Co. Inc. (Kansai Electric) from Japan, EGAT International Co. Ltd. (EGATi) from Thailand, and Lao Holding State Enterprise (LHSE) from the Lao PDR.
2. The NNP1 is situated on the Nam Ngiep River in the middle part of Lao People's Democratic Republic (Lao PDR), which is on a left bank tributary of the Mekong River. The project covers parts of Bolikhamxay and Xaysomboun provinces. The construction area lies on the Nam Ngiep River which flows in a south-southeast direction through a mountainous region to the gorge at Hat Gniun village where the topography changes to a hilly landscape before entering the Mekong River at Pakxan. The NNP1PC has requested ADB to provide the Loan described in this Agreement to finance, in part, the construction of the Project and certain other costs and expenditures associated with the development of the Project.
3. The NNP1 consists of two dams. The main dam which is located 9.0 km upstream of Hat Gnuin Village in Bolikhan District, will create a 70-km-long, narrow reservoir that extends up the Ngiep Valley as far as Thathom District, Xaysomboun Province. At almost 150 m high, the main dam will be the second largest in Lao PDR. The Power Station at this dam will generate up to 272 MW of electricity for export to Thailand. A second dam will be located 6.0 km downstream of the main dam to moderate downstream water level fluctuations caused by the operations of the main dam. The downstream regulating dam will have a capacity of 18 MW to be used on the domestic Lao electricity grid. With a combined capacity of 290 MW, NNP1 will generate around 1,620 GWh of electricity annually.
4. Two transmission lines will be required to transport the electricity generated by the project. A 115-kV transmission line will run from the regulation dam power station to Pakxan sub-station, a distance of 40 km; and from the main dam power station a 230 kV line will run for 125 km to the Nabong Sub-station outside Vientiane Capital.
5. NNP1 will connect its 230 kV transmission line into the Nabong sub-station, where the power will be stepped-up to 500 kV and evacuated to the Thai grid via an existing 27 km long 500 kV transmission line. For this to occur, the Nabong sub-station needs to be upgraded with a 230 kV switch-yard and a 500 kV transformer sub-station. The upgrade will be installed on 1.5 ha within the existing 42 ha sub-station compound.

B. Due Diligence Assessment

6. The NNP1PC has signed agreements with project lenders that requires NNP1PC to adhere to the Asian Development Bank (ADB) environmental and social safeguard policies (the Safeguards); and as the upgrade of the Nabong Sub-station is considered an associate facility to the NNP1, the project Facility Agreement (FA) requires that for NNP1PC conducts an environmental and social due diligence assessment (DDA) before the start of the upgrade works at Nabong sub-station. The existing 27 km long 500 kV transmission line that evacuates the power from the sub-station to Thailand is not regarded as an associated facility (it requires no modifications) and is therefore not covered by this due diligence assessment report.
7. The DDA is essentially a review of the environmental and social impact mitigation measures that have been applied to the project affected people, and the local biophysical environment at the Nabong site since its construction in 2010. In line with the Safeguards, the due diligence is to determine if the level of impacts and risks to the environment and people were thoroughly assessed, the mitigation measures have been adequately planned and implemented by developer, and provide additional recommendation (if required) addressing outstanding environmental and social issue.

II. Previous Study and Development

8. In 2007, the Electricite' Du Laos (EDL) planned to build, own and operate a 500 kV transmission line from Nabong to Thinthaien and the Nabong sub-station. These facilities are to evacuate power from Laos to Thailand. The sub-station and transmission line were intended to be used as a common transmission facility of the Nam Ngum 2, Nam Ngum 3, Nam Theun 1, and Nam Ngiep 1 hydropower projects.
9. The Initial Environment Examination (IEE) was conducted by EDL in 2007 for the 500 kV transmission line from Nabong to Thinthaien and the Nabong sub-station, and the Environment Compliance Certificate (ECC) was issued by the Water Resources and Environment Administration (WREA) on 16 October 2007 for this IEE.
10. In 2009, another IEE was prepared by Fichtner as part of the Technical Assistance by ADB. The IEE includes a due diligence on the Nam Ngiep 1 and Nam Ngum 3 to determine compliance with the 2002 ADB Environmental Policy then in effect.
11. In 2010, the Nam Ngum 2 Power Company Limited (NN2PC) constructed and is now operating a 230-kV switch-yard in Nabong sub-station and 27 km of 500 kV transmission line from Nabong sub-station to Thinthaien in accordance with the design approved by Electricite' du Laos (EDL), and the full IEE that was approved by MONRE in 2007. Currently,

the EDL and the Electricity Generating Authority of Thailand (EGAT) act as operators of the project¹.

12. In 2011, an additional IEE was prepared by EDL for the ADB assistance. Since the 2007 IEE approved by WREA was prepared based on the ADB 2002 Environmental Policy, the 2011 IEE was intended to update the previous IEE in compliance with ADB's 2009 safeguard policy statement.
13. The 2011 IEE report describes the proposed expansion project, its location, documents the environmental performance of the existing project, and describes the potential impacts of the proposed development project on existing environment including its impact on the local community.
14. The 2011 assessment confirmed that an ECC for the Nabong-Thinthaen Transmission Line Project, including the 230 kV/500 kV sub-station had been issued by WREA on 16 October 2007. Since the expansion project is already covered by the ECC issued by WREA, the expansion project may be exempted from preparing another EIA subject to confirmation by WREA.
15. Various studies were conducted for the Nabong sub-station and the 500 kV Transmission Line, including the expansion parts, and all confirmed that there was no significant environment and social impacts caused by the project. Most of impacts are localized and short term, and they were mitigated previously according to the mitigation measures provided in the EMPs.

III. Environment Impacts and Mitigation Measures under Previous Development

16. The assessment in 2007 confirmed that the Environment and Social impacts are localized, short term and can be mitigated, and that a full Environment Impact Assessment (EIA) would not be required. The assessment was carried out in detail for the area of 42 ha (600m X 700 m) of the sub-station and 27 km of 500 kV transmission line. The following paragraphs summarize the most significant environmental and social aspects identified and assessed in the IEE.
17. Water and Water Resources. The Nabong sub-station is located a few Kilometers from the Nam Ngum River but not on any of water courses or wetland. The study indicates that the 500 kV transmission lines cross a few small streams, which usually run dry in the dry season.

¹ Initial Environmental Examination: Nabong 500kV Switch-yard and Transmission Line Facility, Electricite du Lao for the Asian Development Bank, June 2007.

18. Forest Resources. The 2007 study found that the Nabong sub-station land area was covered by forests (table 1). It is within Ban Nabong land area but does not overlap with any individual property. There are three types of forests in Lao PDR, namely, Conservation Forest, Protection Forest, and Production Forest. The forest area at Nabong sub-station was not in one of these forest types. However, this forest is a village use forest area, where villagers owned as a communal property and use for NTFP and firewood collection. Figure 2 shows vegetation cover in Nabong sub-station area.

Table 1. The forest type at the Nabong sub-station

Land use and forest type	Area (ha)	%
Mix Deciduous Forest	21.75	49.37
Unstock Forest	9.77	22.18
Scrub and Swidden	12.53	28.44

Source: IEE study for 500 kV Transmission Line from Nabong to Thinthaen and the Nabong sub-station. Main Report, July 2007, EDL.

19. Wildlife and Aquatic Animal has been surveyed by village interview and field observation. Since the forest area of proposed Nabong sub-station was heavily degraded before the year 2007, the survey suggested that there was no wildlife and aquatic animal found in the project area.
20. Socio-Economic and Cultural Conditions were carefully assessed in the 2007 IEE and the IEE found that there would be no direct impact on local environment and communities caused by the Nabong sub-station construction. However, indirect impacts may occur as the area has been used by local communities for collection of firewood and other non-timer Forest Products (mushroom, bamboo shoot, wild fruits and vegetables etc.).
21. UXO Condition. The UXO condition was carefully considered during the IEE assessment in 2007, fortunately, the Nabong sub-station is not located on an area likely to contain UXOs.
22. The 2007 IEE process indicated that a proper consultation process was conducted with national and local communities and authorities. The 2011 assessment confirmed that the evaluation of the pre-construction, construction, and operational phases of the project components was properly done and results of public consultation meetings with the affected community, and site assessment indicate that the Nabong sub-station and the 500 kV transmission line project are likely to generate only minor adverse impacts to the environment.
23. Villagers' Perceptions and Opinions on the Project was assessed during 2007 IEE process, villagers in three project districts were asked about their opinion on the project (including

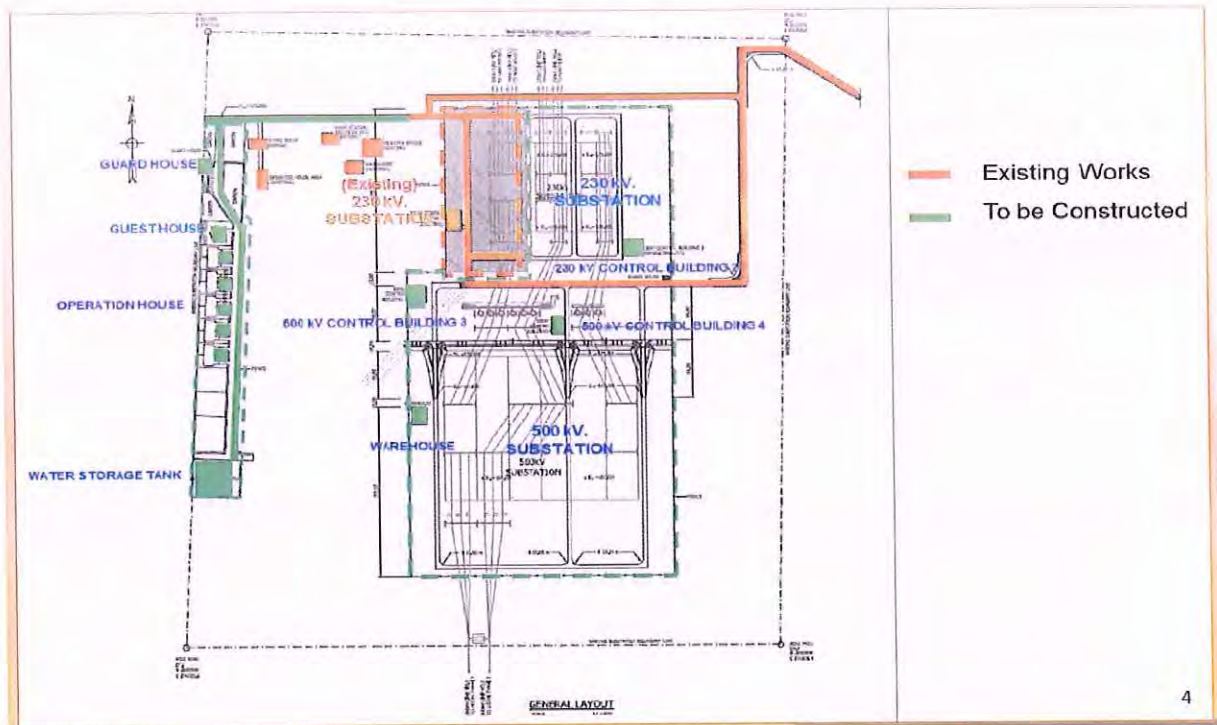
the 500kV transmission line). Their general perception was “no problem” on environment aspects and “slight problem” on the social aspects.

24. The concerns raised by local communities during the consultations were about fair compensation for land acquisition. The 2007 EMP indicates that the compensation will be provided accordingly to the project affected people. In addition, the EMP confirmed that the sub-station is located within the 42 ha of land that was already acquired by EDL for the project, and the construction will not encroach on any person’s land use rights, therefore, it was determined that the construction of the sub-station would not necessitate any compensation. As part of this DDA, NNP1PC has further assessed the issue on compensation for acquisition of land. On 23 September 2016, NNP1PC arranged a meeting with Nabong and Phonekham Village authorities to obtain information about compensation to the affected people due to the construction of Nabong Sub-Station. The meeting confirmed that the Nabong Sub-Station including the Upgrade Works is located within the communal land and no individual compensation is required. The minute of meeting is attached in Annex 1.
25. The 2011 assessment indicates that the DDA conducted by EDL on the sub-station and the 500 kV transmission line had confirmed that the environment and social impact mitigation measures during the first construction of the transmission line and sub-station have been satisfactorily addressed.

IV. The Nabong Sub-station Upgrade

26. The upgrade works include construction of a 230 kV switch-yard and its control building for NNP1, a 500 kV sub-station and two control buildings, warehouse, operation house, guest house, and guardhouse. However, all new facilities will be constructed within the compound of the existing 42 ha of Nabong sub-station. Figure 1 below provides an overview of the upgrade works. In addition, equipment such as power transformer, circuit breakers, disconnecting switches, current transformers, and voltage transformers will be acquired for installation at the 500 kV sub-station. NNP1PC met with the EDL and MEM (DEB), and letters were sent to EDL on 7th September 2016 and to Nam Ngum 2 (NN2) on 16 November 2016 requesting an approval letter for the Nabong Substation Upgrade Work. MEM/DEB has furnished NNP1PC with a copy of the Notice to Proceed (NTP) issued by NN2, which confirms that all government approvals have been issued. The NTP is provided in Annex 2.

Figure 1. Nabong sub-station upgrade scope of work



V. Anticipated Environment Impacts and Mitigation Measures

27. It was confirmed by the 2011 IEE that, during the pre-construction and design phase of the expansion of the sub-station, the potential impacts to be addressed relate to:
- Pre-identification of disposal site for cut soil, bushes, and other vegetation;
 - Improvement of the worker camps and facilities to prevent impacts on workers' health, hygiene, and sanitation;
 - Implementation of environmentally sound procurement policies when acquiring equipment, materials, and other goods for the project.
28. The short-term construction-related environmental impacts were identified, such as potential increased ground level concentration of dust, noise, soil erosion and sedimentation, and public and worker safety – all of which can be mitigated and managed effectively with well-described construction management directives and guidelines. The assessment highlights the following mitigation measures during construction of the sub-station:
- Provision of silt traps/sedimentation pits within the project site to avoid runoff of sediments into the adjacent areas;
 - Avoidance/minimization of dust emission through water sprinkling in areas prone to dust generation;

- Specification for the handling and transporting of materials along village roads to avoid excessive dust generation, noise, traffic-related accidents, and damage to existing access roads;
 - Implementation of a construction health and safety management plan, including guidelines for good housekeeping while operating at workers camps;
 - Proper disposal of construction debris;
 - Tree planting to compensate for loss of vegetation;
 - Planning for proper and environmentally acceptable decommissioning of work sites through environmental enhancement techniques, re-vegetation, fencing, among others;
 - Hiring of local villagers during the construction of the sub-station expansion project; Implementation of community health and safety plan.
29. Nabong Village has a population of 635 and Phonekham Village has 331². These villages, but particularly Nabong which is the nearest village settlement, would bare the greatest impact from construction – positive and negative. There will be about 400 workers employed during the construction of the sub-station, which could take up to two years. Camp followers may also converge to the area. Currently, there are five workers assigned at the existing 230 kV switch-yard. Once the upgrade is completed, there will be about 20 additional workers for its operation¹. The presence of the workforce could lead to:
- Place pressure on existing NTPF resources;
 - Increase dust and noise pollution in the village settlement;
 - Create changes to social behaviors and norms;
 - Aggravate local health problems;
 - Increase the risk of traffic related accidents;
 - Water pollution;
 - Construction accidents and spills.

VI. Recent Change to the Environment

30. The 2011 IEE states that works for the upgrade of the sub-station were scheduled to commence in 2013 but to date very little development has happened at the site since 2010. The description of the sub-station environment within the 2011 IEE remains largely the same, with the exception of land preparations work on the 115 kV switch yard. (Refer to **Error! Reference source not found..**)
31. The NN2PC sub-station and control room is contained behind a fenced perimeter with a guard house. The remainder of the Nabong site remains unfenced and is serviced by a

² Report on the Initial Environmental Examination for the Nabong-Thinthean 500kV Transmission Line and Sub-station, EDL 2007

concrete ring-road. An office and minor construction site been established for the 115 kV is outside the NN2PC compound.

Photos 1. Work area at the 115 kV switchyard, October 2015

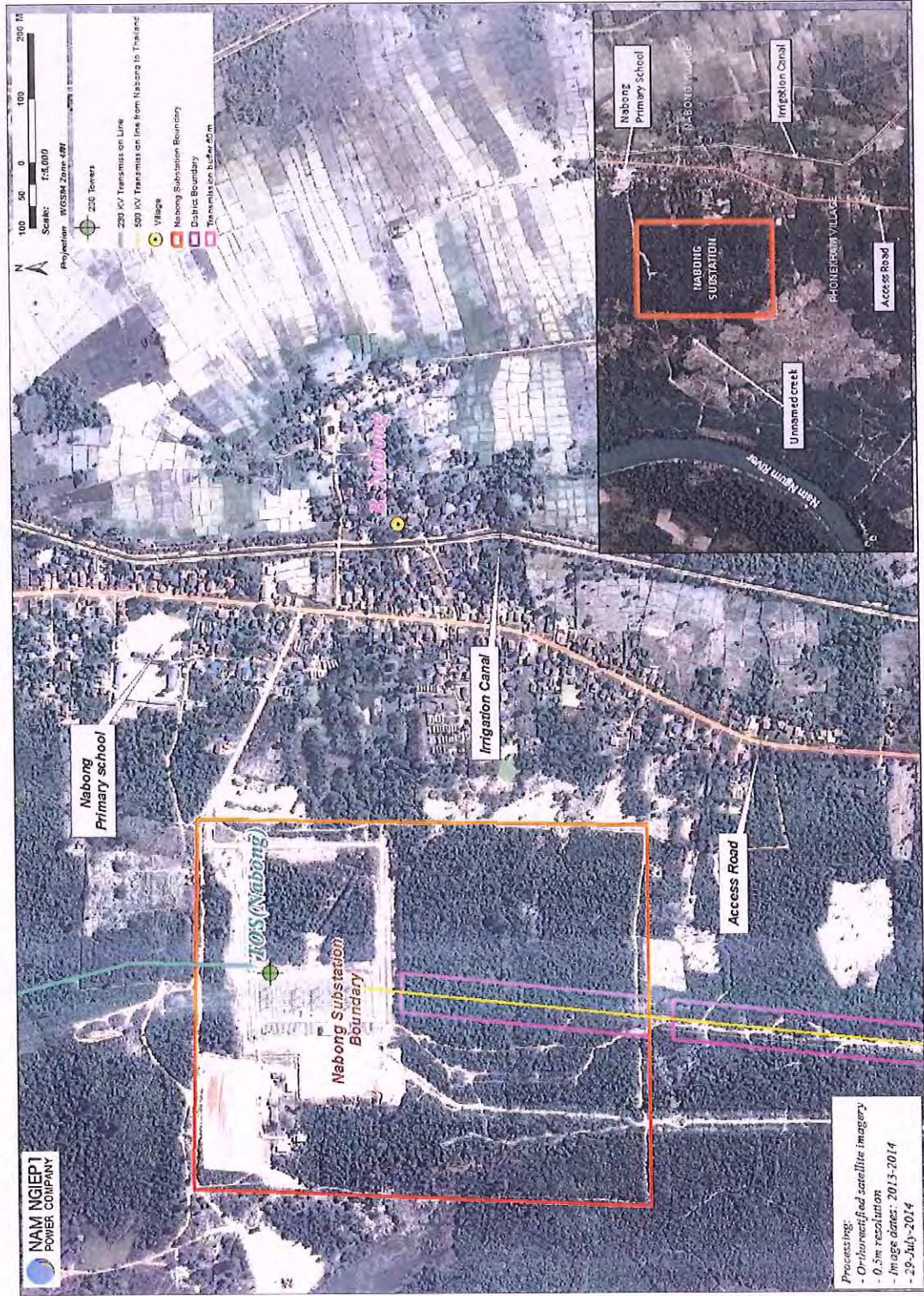


Photos 2 Proposed NNP1 Switch-yard Bay– partially cleared in unfenced area, extending into the vegetation stands left of shot. Note: NN2PC Switch-yard on right of frame within a fenced perimeter, and the 500 kV switch-yard land at the distant end of the photo frame.



32. Vegetation. The most significant change to the environment at the Nabong sub-station in the intervening period from 2010 has been to total vegetation coverage of the site. The total area of cleared land since the construction of the NN2PC switch-yard is 11.86 ha. Refer to Figure 2.
33. The vegetation of the sub-station includes bamboo (*Bamboosa spec.*) mixed with soft wood tree species such as mai Bok (*Invingia mahayana*), mai safang (*Peltophorum dasyrachis*), mai va (*Syzygium spec.*), mai khimou (*Ormosia cambodiana*), mai khefoi (*Stereospermum fimbriatum*), etc. It is reported that other valuable species of trees such as mai dou (*Pterocarpus macrocarpus*), Mai tae (*Afzelia xylocarpa*) and others were removed from time to time for domestic use for construction of houses and other structures. It was heavily removed for exchange with electricity network installation for the village in the year 2002¹. The site assessment of 13th October 2015 found the vegetation structure was similar to that described 2011. Refer to Photos 2 and Photos 3. From a conservation perspective, in general, the site of the sub-station is covered by forest of different types but the area does not represent a site of specific ecological value¹.

Figure 2. Nabong sub-station vegetation cover as of 29th July 2014. Inset photo shows Nabong sub-station pre-2010



Photos 3. Vegetation cover of the 500 kV Switch-yard



34. Change to other environment. The following table 2 presents a summary of other environmental changes at site compared to descriptions provided in IEE, 2011.

Table 1. Summary of environmental change

Environmental Resource	Condition change since 2011	Comment
Topography	No discernable change	-
Geology/Soils	No discernable change	-
Water Resources	No discernable change	-
Climate	No discernable change	-
Forest/Biological Resources	Changed	Increased fragmentation of the regenerated forest area
Land use	No discernable change	-
NTFP/TFP	Change	Reduced area

35. Villagers continuing use of the site. Although the land title has been granted to EDL for the project, the sub-station land area occupied the use forest area belonging to Nabong and Phonekham Villages, both located within Pakngum District. The sub-station site itself is not used for rice or other agricultural crops cultivation, but the residents continue to

collect firewood, mushrooms, bamboo shoots, and wild edible leaves for home consumption and trading from the site allocated for the sub-station construction. However, since this forest area was long time degraded, the collection NTFP in the area is only occasionally. Access to the area is restricted only to the existing NN2PC facility, and it was observed during the site inspection that villagers continue to collect some forest products from the un-cleared forest areas.

36. The sub-station core area is 42 ha of forest area which is gradually fragmented, particularly the area belonging to the 500 kV switch-yard. However, this represents a convenient and potentially some source of NTFP for Nabong and nearby villagers. The vegetation cover of the sub-station remains largely connected to forests in the south and west, but these areas are also fragmented and degraded. To the east is Nabong village and on the opposite side of the road, land is occupied by rice paddy cultivation. To the north, the construction of the NN2PC switch-yard facility has broken connection with nearby forest.
37. Clearing of the sub-station for construction, widening roads and the introduction of a 400-strong work force would reduce the NTFP value of the site to negligible, and introduce pressure on adjacent forest areas. From the start of construction villagers will be required to travel further and into potentially less productive areas for NTFP.
38. Timber, NTFP and Wildlife Habitat Values. In terms of terrestrial fauna, previous reports and according to information from villagers (as cited in the 2007 IEE), there are only a few species of birds and common reptiles within and around the sub-station area and along the transmission line corridor. These are limited to common species of reptiles, insects, birds and vermin that have become adapted to human activities. Threatened or endangered species were not reported. This could be due to the fact that the area has been disturbed for a long period of time by previous hunting, habitat destruction, and by shifting cultivation, commercial wood cutting, forest fires, and other man-induced activities¹. These activities and pressures persist to the current day.
39. The sub-station access road is a main corridor used by Nabong villagers to access the nearby Nam Ngum River, which is routinely used for its fisheries. The construction of the upgrade would not significantly hinder or inconvenience this access, but controls would need to be in place to prevent public access to the site.

VII. Institutional Arrangement

40. It remains unchanged to the previous assessment, the EDL has an Environmental Office (EO) under the Technical Department which is composed of sufficient staff. A Project Implementation Unit (PIU) will be established to coordinate activities of the EO and the Transmission Department of EDL. The PIU will be responsible for supervising the implementation of environmental mitigation, social development programs including

compensation, and monitoring measures during the construction and operation of the project. The PIU will also coordinate with the community and act as bridge of the community to the company.

VIII. Conclusion and Recommendation

- The 2011 IEE states that works on the sub-station upgrade were scheduled to commence in 2013 but to date very little development has happened at the site since 2010. The description of the sub-station environment within the 2011 IEE remains largely the same, with the exception of land preparations work on the sub-station.
- Equally, the Environmental Management Plan in the 2007 and 2011 IEE reports still retains currency as does the recommendations the Due Diligence Assessment that was conducted at the site as part of the IEE Preparation. If permissible, a Site Specific Environmental and Social Management and Monitoring Plan to be developed and implemented in compliance with 2007 and 2011 IEEs.
- Construction was scheduled to start in 2013 but this is now not expected until the second quarter of 2016. Because of the delays it is recommended that consultations with affected villagers be refreshed so as to inform of the revised schedule construction and operational activities.
- Forest areas will be razed for construction and result in a loss of NTFP and game resources, but previous assessments have considered the area to be low producing. The loss of vegetation areas due to the construction activities could generate dust and water pollutions risks and these can be mitigated by conventional measures in close consultation with villagers and local authorities.
- As reported, there are still various issues that will be encountered by the affected people. In order to resolve these concerns effectively and timely, a Grievance Redress Mechanism for complaints needs to be refreshed in the pre-construction phase. Bringing local authorities and company representatives to assist. The refreshed consultations should focus on Grievance Redress Mechanism establishment.
- As areas of forests are to be cleared, villagers should be informed of the clearing schedule but then allowed the opportunity to collect what-ever forest materials they regard as valuable during the pre-construction phase.
- Ongoing engagement with Nabong partners on the design, construction and operational matters of the Nabong Station development.
- A training program to the Implementing Agency (EDL) to undertake environmental management and monitoring was recommended as part of long term and continuously capacity building program. A training program addressing work safety, EMP implementation, inspection and corrective action, environmental standard operating procedures, proper handling and disposal of spoils, protection of local vegetation and water resources, and avoiding impacts on local population from noise and dust-generating activities were proposed.

Annex 1. Minute of Meeting held on 23 September 2016 at Nabong village



ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

ອຳນາດການປົກຄອງ ບ້ານ ນາບົງ
ເມືອງ ປາກງື່ມ, ນະຄອນຫລວງ ວຽງຈັນ

ວັນທີ: 23/09/2016

ບົດບັນທຶກ

**ກອງປະຊຸມປຶກສາຫາລືການຊົດເຊີຍ ເຂດພື້ນທີ່ກໍ່ສ້າງສະຖານີໄຟ ແຮງສູງ 500 kV
ບ້ານ ນາບົງ, ເມືອງ ປາກງື່ມ, ນະຄອນຫລວງ ວຽງຈັນ**

- ອີງຕາມສັນຍາສໍາປະທານ (CA) ລະຫວ່າງ ລັດຖະບານ ສປປ ລາວ ກັບ ບໍລິສັດໄຟຟ້າ ນໍ້າງຽບ 1 ຈຳກັດ, ສະບັບເລກ ທີ 1973. ລົງວັນທີ 27 ສິງຫາ 2013.
- ອີງຕາມ ເອກະສານ ການສຶກສາຜົນກະທົບເບື້ອງຕົ້ນ ດ້ານສິ່ງແວດລ້ອມ ແລະ ສັງຄົມ ການກໍ່ສ້າງສະຖານີ ແລະ ສາຍ ສົ່ງໄຟ ແຮງສູງ 500 kV ນາບົງ-ຖິ່ນແທ່ນ ສະບັບ ເດືອນກໍລະກົດ2007 ແລະ ສະບັບ ເດືອນມິຖຸນາ 2011.
- ອີງຕາມ ແຜນການຕິດຕັ້ງອຸປະກອນເພີ່ມເຕີມ ເພື່ອເຊື່ອມຕໍ່ກະແສໄຟຟ້າຂອງໂຄງການເຂື່ອນໄຟຟ້ານໍ້າງຽບ 1 ເຂົ້າກັບ ສະຖານີນາບົງ.

ບໍລິສັດໄຟຟ້ານໍ້າງຽບ 1 ໄດ້ຈຳກັດກອງປະຊຸມຮ່ວມກັບອຳນາດການປົກຄອງບ້ານ ນາບົງ ແລະ ບ້ານ ໂພນຂາມ ຂຶ້ນໃນເວລາ 14:00 ໂມງ ຂອງວັນທີ 23 ກັນຍາ 2016 ຢູ່ທີ່ຫ້ອງປະຊຸມ ຂອງຫ້ອງການບ້ານນາບົງ, ເມືອງປາກງື່ມ, ແຂວງກໍາແພງນະຄອນ. ເພື່ອປຶກສາຫາລື ເຖິງການປະຕິບັດພັນທະການຊົດເຊີຍທີ່ໄດ້ຮັບຜົນກະທົບຈາກການກໍ່ສ້າງ ສະຖານີ ໄຟແຮງສູງ 500 kV ນາບົງ ໂດຍມີຜູ້ຕາງໜ້າອຳນາດການປົກຄອງບ້ານນາບົງ ແລະ ບ້ານໂພນຂາມ ເຂົ້າຮ່ວມ ທັງໝົດ ຈຳນວນ 05 ທ່ານ (ມີລາຍຊື່ເຊັດຕິດມາທ້ອມນີ້).

ກອງປະຊຸມໄດ້ຮັບຝັງເຫດ ແລະ ຜົນຂອງການສຶກສາຄືນການປະຕິບັດພັນທະການຊົດເຊີຍຕໍ່ຜູ້ທີ່ໄດ້ຮັບຜົນ ກະທົບຈາກການກໍ່ສ້າງສະຖານີ ໄຟແຮງສູງ 500 kV ນາບົງ, ກອງປະຊຸມ ໄດ້ມີປຶກສາຫາລື ແລະ ເອກະພາບກັນໃນ ລາຍລະອຽດດັ່ງນີ້ :

1. ການກໍ່ສ້າງ ສະຖານີ ໄຟແຮງສູງ 500 kV ນາບົງ ໄດ້ມີການ ກຳນົດໃນເນື້ອທີ່ຈຳນວນ 47 ເຮັກຕາ (ດິນ ບ້ານ ນາບົງ ແລະ ບ້ານ ໂພນຂາມ), ເມືອງປາກງື່ມ, ແຂວງກໍາແພງນະຄອນ.
2. ເນື້ອທີ່ດິນດັ່ງກ່າວແມ່ນເປັນດິນລວມຂອງສອງບ້ານ, ບໍ່ໄດ້ແຕະຕ້ອງຫລືກວມເອົາດິນບຸກຄົນ ແລະ ໄດ້ມີ ການມອບໂອນໃຫ້ບໍລິສັດໄຟຟ້າລາວເປັນທີ່ຮຽບຮ້ອຍແລ້ວ.
3. ສ່ວນດິນບຸກຄົນທີ່ໄດ້ຮັບຜົນກະທົບໃນຂອບເຂດບ້ານນາບົງແລະ ບ້ານ ໂພນຂາມ ແມ່ນຈາກການກໍ່ສ້າງ ແລວສາຍສົ່ງຂອງບໍລິສັດໄຟຟ້ານໍ້າງຽບ2 ແລະ ໄດ້ຮັບການຊົດເຊີຍເປັນທີ່ຮຽບຮ້ອຍແລ້ວ.

ພາກສະເໜີ: ຂໍໃຫ້ບັນດາເຂື່ອນທີ່ເອົາໄຟເຂົ້າໃນສູນ ນາບົງ ໄດ້ພິຈາລະນາຊ່ວຍທັງສອງບ້ານ ໃນການພັດທະນາ
 ໂຄງລ່າງ ເປັນຕົ້ນ ແມ່ນນໍ້າສະອາດ, ຫໍປະຊຸມບ້ານ, ເສັ້ນທາງຊອບ.
 ກອງປະຊຸມ ໄດ້ດໍາເນີນໄປເປັນເວລາ 01 ຊົ່ວໂມງ ແລະ ໄດ້ປິດດ້ວຍຜົນສໍາເລັດເປັນຢ່າງດີ.

ດັ່ງນັ້ນ, ຈຶ່ງໄດ້ສ້າງບົດບັນທຶກສະບັບນີ້ໄວ້ເປັນເອກະສານເພື່ອອ້າງອີງ ແລະ ລາຍງານພາກສ່ວນທີ່ກ່ຽວຂ້ອງ
 ຊາບ ແລະ ນໍາໃຊ້.

ອໍານາດການປົກຄອງທັງສອງບ້ານ

ຜູ້ບັນທຶກກອງປະຊຸມ

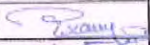


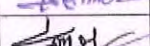
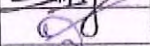
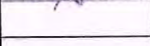


ອຸນຄາ ມະນີ



ສິມຄິດ ພິນສິລິ

ລາຍຊື່ຜູ້ເຂົ້າຮ່ວມກອງປະຊຸມ.

ລຳດັບ	ຊື່ ແລະ ນາມສະກຸນ	ໜ້າທີ່ຮັບຜິດຊອບ	ລາຍເຊັນ
1.	ທ່ານ ວອນໄຊ ອຸໄທທິດ	ຮອງເລຂາທູລະການ ບ້ານ ສິນໄຊ	
2.	ທ່ານ ສິງຄຳ ອິນທະຈັກ	ນາຍ ບ້ານນາບົງ	
3.	ທ່ານ ສິມຄິດ ສິມສິລິ	ບ້ານ ໂພນຂາມ	
4.	ທ່ານ ຂັນຕິ ດວງບຸບຜາ	ຮອງ ນາຍບາວັນ ນາບົງ	
5.	ທ່ານ ຄຸ່ນ ຄຳມະນີ	ນາຍບາວັນ ນາບົງ	
6.	ທ່ານ ແສງສິມເດດ	ໄພ່ພົ້າ ເມືອງໄຊທານີ	
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Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

Village Authority of Nabong

Pak Ngeum District, Vientiane Capital

Date: 23/09/2016

Minute of Meeting

Discussion on Compensation for the 500 kV Sub-Station Construction Area

At Nabong Village, Pak Ngeum District, Vientiane Capital

- In reference to the concession agreement (CA) between the Lao PDR and the Nam Ngiep 1 Company, number 1973 dated 27 August 2013.
- In reference to the Initial Environmental Examination (IEE) for the construction of Nabong Sub-Station and Nabong-Thin Thean 500kV Transmission Line version July 2007 and June 2011.
- In reference to the plan for installation of additional facilities to connect the Nam Ngiep 1 project (NNP1) transmission line with the Nabong Sub-Station.

The Nam Ngiep 1 Company (NNP1PC) organized a meeting with village authority from Nabong and Phonekham villages at 14:00 of 23 September 2016 at the Village's Hall of Ban Nabong, Pak Ngeum District, Vientiane Capital to discuss compensation issue to the affected people due to the construction of Nabong Sub-Station. Five representatives of Nabong and Phonekham Village authorities as listed in the annex to this minute of meeting participated in the meeting.

Participants at the meeting were informed about the objective of the meeting and the due diligence assessment (DDA) for the Nabong 500 kV sub-station. The participants discussed and agreed on the following:

1. The Nabong 500 kV substation will be constructed on a total land area of 47 ha of Nabong and Phonekham villages, Pak Ngeum district, Vientiane Capital.
2. The Nabong substation land area is a communal land area of the two villages, there was no individual land in this area and was already granted to the EDL.
3. The only impact on individual land and assets in Nabong and Phonekham villages was due to the NN2 transmission line construction and the affected people have received their compensation.

Proposal: propose to all the dams that connected their electricity into the Nabong Sub-Station to consider additional supports for infrastructure development in the two villages, such as, water supply, villages meeting hall, and intersection of villages' roads etc.

The meeting was constructive and lasted for one hour.

Therefore this Minute of Meeting was issued as a reference document and inform concerned parties for their information and future use.

Two villages' authorities

Minute taker

Meeting participants.

No.	Name	Title/Responsibility	Signature
1.	Mr. Vonexay Outhaithith	Deputy Chief, Sinxay Village Cluster	
2.	Mr. Singkham Inthachak	Former Nabong Village Chief	
3.	Mr. Somkhith Phanhsili	Phonekham Village Chief	
4.	Mr. Khanti Douangboupha	Nabong Village Deputy Chief	
5.	Mr. Oun Khammany	Nabong Village Chief	
6.	Mr. Sengsombdeth	Xaythany District Electricity Du Laos (EdL) staffer	
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Annex 2. Notice to Proceed.



Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

Ministry of Energy and Mines
Department of Energy Business

1892
No: /MEM.DEB-CD
Date: 28 OCT 2016

Mr. Yoshihiro Yamabayashi
Manager Director
Nam Ngiep 1 Power Company
Unit 16, Dongpaina Road, Sisattanak District
Vientiane Capital, Lao PDR
Tel: +856-21-261251, Fax : 856-21-261252.

SUBJECT: COPY OF NTP PER COMPANY'S REQUEST.

Dear Sir,

- With reference to your letter No.812/NNP1PC-VTE-OUT/16, dated 21 October 2016.

Department of Energy Business (DEB) would like to provide you a copy of letter of Notice to Proceed, which Nam Ngum 2 company issued to its EPC contractor for Nabong Upgrade.

Sincerely yours,

Sychath BOUTSAKITTIRATH
Deputy Director General

Attachment:

- Letter of Notice to Proceed no. NN2PC/NN2/150/2016, dated 15 September 2016.

Contract Division, Department of Energy Business, Ministry of Energy and Mines, Vientiane Capital,
Tel: 021 263 208, Fax: 021 415 626, email: energy@deb.gov.la, web: www.poweringprogress.org

ບໍລິສັດ ໂນນັງມຸມ 2 ຈຳກັດ
215 ທາງລາເນຂາງ ວ. ຊຽງເວີນ ມ. ຈັບທະບູລີ ນະຄອນຫຼວງວຽງຈັນ
ໂທ +856 (021) 251 718
ຟັກ +856 (021) 252 060



NAM NGUM 2 POWER

Nam Ngum 2 Power Company Limited
215 Lanexang Avenue, Vientiane, Lao PDR
Tel: +856 (021) 251 718
Fax: +856 (021) 252 060

REF: NN2PC/NN2/150/2016

15 September 2016

Ch. Karnchang (Lao) Company limited
215 Lanexang Avenue, Baan Xiengyeun
Chanthabouly District, Vientiane Capital
Lao PDR

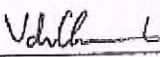
Notice to Proceed

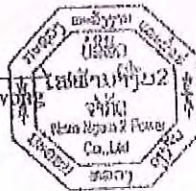
We refer to the Engineering, Procurement and Construction Contract between NAM NGUM 2 POWER COMPANY LIMITED ("the Owner") and CH. KARNCHANG (LAO) COMPANY LIMITED ("the EPC Contractor") dated 20 April 2016 (the "EPC Contract"). The capitalized terms used below shall have the meanings as set forth in the EPC Contract.

Pursuant to Subsection 5.2 of the EPC Contract, we hereby notify you that all of the conditions precedent under Subsection 5.2.2 have been met. Thus we now authorize the EPC Contractor to proceed with the Work in accordance with the EPC Contract.

In accordance with Subsection 5.3 of the EPC Contract, we request that the EPC Contractor commence the Work immediately.

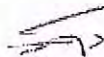
Sincerely,
NAM NGUM 2 POWER COMPANY LIMITED


Vorapote U. Choepaiboon
Managing Director



We, CH. KARNCHANG (LAO) COMPANY LIMITED hereby acknowledge and agree that the NTP Date has occurred pursuant to Subsection 5.2.4 of the EPC Contract and thus shall commence the Work immediately.

Sincerely,
CH. KARNCHANG (LAO) COMPANY LIMITED

By: 
Date: 27 SEP 2016



