600MW WIND FARM POWER PROJECT

IN

DAKCHEUNG, SEKONG PROVINCE AND SANXAY, ATTAPEU PROVINCE.

ANNEX C (FINAL DRAFT)

INTEGRATED ENVIRONMENTAL AND SOCIAL OBLIGATIONS OF 600MW WIND FARMPOWER PROJECT.

# SUBMITTED TO:

DEPARTMENT OF ENVIRONMENT

MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

SUBMITTED BY:

MONSOON WIND POWER COMPANY LIMITTED

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#### ANNEX C

# Integrated Environmental and Social Obligations for the 600 MW Wind FarmPower Project

#### PART 1: GENERAL APPLICABILITY

# 1. Responsibility for the Project Impacts

- a) The Company, as the developerand owner of the Project bears full responsibility for all environmental and social impacts of the Company's activities and the Project provided in this Annex C to the extent that such impacts exceed the levels of impact permitted by the Standards set forth in Annex C and Annex Pof the Concession Agreement. Such responsibility includes, among other things, the obligations of the Company to meet the Standards, in order that all adverse environmental and social impacts are, in each case in accordance with the Standards:
  - (i) avoided, whenever and wherever reasonably possible;
  - (ii) reduced, whenever and wherever possible, to the extent reasonably possible, when avoidance cannot be achieved;
  - (iii) remedied, to the extent reasonably possible; and
  - (iv) compensated to the GOL or the affected persons, or offset in terms of biodiversity impacts, as applicable, whenever such adverse environmental and social impacts have not been wholly avoided, reduced, or remedied by the Company.

# 2. GOL's Right to Require the Company to Modify the Environmental or Social Measures

- a) The GOL shall have the right to require the Company to modify the Measures (in consultation with the Company) and the Company shall modify the Measures accordingly and implement such modifications, if, at any time, the GOL determines that:
  - (i) the Measures are insufficient or inadequate to mitigate the actual or likely Adverse Impacts of the Project, or to enable the Company to comply with its obligations;
  - (ii) new information becomes known about how harmful the Adverse Impacts are or are likely to be or become;
  - (iii) the Project has Adverse Impacts which could not be foreseen at the time the relevant environmental or social management plans were approved;
  - (iv) the Adverse Impacts are greater than those anticipated impacts that formed the basis for the preparation of the relevant approved ESMMPs;
  - (v) the size or boundary of the Project changes, or a subsequent extension of the Project development is proposed, changing the basis for the Measures in the relevant approved ESMMPs; or
  - (vi) the Measures are unnecessary or ineffective in mitigating the Adverse Impacts.
- b) For the avoidance of doubt, modifications to the Measures required by the GOL under Sub-Clause (a) above shall not be eligible for treatment as a Change in Law under the Concession Agreement or this Annex C, or be subject to any compensation or financial or other adjustment by the GOL to the Company.

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# 3. Adherence of Others to Standards

The Company shall ensure that all Contractors, Subcontractors, Operation and Maintenance Contractors, employees, agents, representatives, and consultants or any other entity employed, hired, or authorized by the Company, in each case, acting for or on behalf of the Company (excluding, for the avoidance of doubt, the GOL and its employees, agents, representatives, and consultants), shall comply in all material respects with the Standards. Toward that end, the Company shall require in all its contractual arrangements with such entities (and shall require its Contractors and their Subcontractors in all their contractual arrangements relating to the Project with their analogous entities) that each such entity is made fully aware of the existence and contents of the Standards and their applicability to, and legally binding effect on, such entity's performance as evidenced by such entity's countersignature to such contract. The Company shall provide the GOL with a true and complete copy of the relevant language and signature pages from any or all or its contractual arrangements upon the written request therefor by the GOL. Before the GOL exercises any right against the Company with respect to this provision, the Company shall have a reasonable period of time within which to enforce its rights against any such non-complying Contractor, Subcontractor, Operation and Maintenance Contractor, employees, agents, representatives, and consultants and to remedy such default. Nothing provided herein shall prevent the right of the GOL to take action directly against any such non-complying entity.

# 4. Company's Responsibility for Others

a) The Company shall bear full responsibility for any adverse environmental or social impact caused by the actions and omissions of its Contractors, Subcontractors, Operation and Maintenance Contractors, employees, agents, representatives, and consultants or any other entity employed, hired, or authorized by the Company, in each case, acting for or on behalf of the Company (excluding, for the avoidance of doubt,the GOL and its employees, agents, representatives, and consultants), in carrying out their work on the Project.

# 5. Confidentiality and the Public's Right to Information

- a) Except as otherwise provided in this Clause 5, the Company and the GOL shall agree on and each shall implement reasonable and prudent safeguards to protect confidential or otherwise potentially sensitive information (including without limitation information of or concerning PAPs) received from the other Party.
- b) Unless otherwise instructed in writing by the GOL, the Company shall release to the public such information about the Company, Adverse Impacts, and other aspects of the Project as would be expected to be known by or available to a well-informed public, including without limitation:
  - (i) the name and address of the Company, its sponsor(s)/investor(s)/shareholder(s) (including the previous sponsor(s)/investor(s)/shareholder(s) at the time of the occurrence of any reportable event), the members of its board of directors, and key management officers;
  - (ii) the specific location and coordinates of each of the Project's current and proposed activities;
  - (iii) the Company's obligations under this Annex C;
  - (iv) information concerning discharges and/or emissions from the Project and the Company's operations;
  - (v) the results of necessary self-monitoring carried out by the Company;
  - (vi) all information obtained by or available to the Company concerning the incidence of Adverse Impacts on people or the environment;
  - (vii) all information obtained by or available to the Company concerning non-compliance with its environmental or social obligations.

- (viii) budgets outlining the Company's obligations as specified under this Annex;
- (ix) the final approved ESIA, ESMMP-CP, ESMMP-OP, Compensation Plan, air quality study and monitoring plan in the ESMMP, Health and Safety Plan, and any other environmental and social study or plan required under Annex C or the Concession Agreement, or the progress reports required under Annex C or the Concession Agreement;
- (x) any warnings, penalties, or other sanctions issued to or imposed on the Company;
- (xi) any other report, information, or data instructed by the GOL to be disclosed by the Company as the GOL may deem appropriate or necessary.
- c) The release of information by the Company to the public as contemplated in this Clause 5 shall be undertaken as follows:
  - (i) whenever required by Applicable Laws;
  - (ii) whenever reasonably requested by the GOL in writing or upon the reasonable written inquiry, request, complaint, or claim from any member of the public (whether an individual, company, organization, or group, and whether or not a PAP) with respect to any publicly reportable matter pursuant to this Clause 5;
  - (iii) within twenty (20) days of the date of: (i) the receipt of such request to disclose information by the Company; (ii) the occurrence of any breach or non-compliance with the conditions of any assessments and plans, Authorizations, or this Annex C; (iii) the approval of the assessments and plans as well as the supplementary reports, provided that each such report in existence as at the Effective Date shall be released not later than twenty(20) days after the Effective Date; and (iv) any issuance to or imposition on the Company of any warning, penalty, or other sanction under Applicable Laws or this Annex C;
  - (iv) in all instances of obligatory public reporting (including without limitation to those required by this Clause 5), the Company shall convey or otherwise make available such information in the following manner (in addition to any other manner that may be required by Applicable Laws);
  - (v) publications in a downloadable form in a dedicated "environmental and social matters" section of the Company's unrestricted and publicly accessible website;
  - (vi) publication and retention of printed materials at a publicly accessible place (during normal business hours): (i) at the Company's offices in the Lao PDR; (ii) at the district and provincial office where the Project or any part thereof is located; (iii) at the central public locations in Affected Communities; and (iv) at an information center to be established and operated by the Company in the largest village near the center of the Project;
  - (vii) through dissemination meetings with PAPs using relevant ethnic languages and appropriate techniques to ensure the understanding and acknowledgement of all PAPs and Affected Communities;
  - (viii) where any inquiry, request, complaint, or claim has been received in writing by the Company, the written response sent to such inquirer / requester, with a copy of both the inquiry / request and the Company's response simultaneously posted to the "environmental and social matters" section of the Company's website and provided to the GOL, in general not less frequently than monthly, but as promptly as reasonably possible in respect of time-sensitive matters;
  - (ix) the Company shall promptly provide the URL and/or links to its website to the GOL and to each person or entity making any inquiry, request, complaint, or claim to the Company relating to the Measures (including those related to livelihood restoration and compensation);
  - (x) the Company shall ensure that the Company's website shall have Lao language navigation / access of the website in order to enable Lao persons easily and quickly to be able to locate and download all material posted in the "environmental and social matters" section of the website, provided, however, that unless otherwise required by the Applicable Laws,



- the Company shall not be required to prepare or provide translation into any other language of requests, inquiries, complaints, claims, or reports; and
- (xi) the Company shall measure, evaluate, and periodically report to the GOL on its compliance with its obligations to make information public as required by this Annex.
- d) The GOL reserves the right, without any liability to the Company, to make public or to share with any third party any and all such data and other information that the Company is required to release under Sub-Clause (b).
- e) For the avoidance of doubt, neither the Company nor any of its Contractors or Subcontractors shall retain or assert any confidentiality to any data, measurements, interpretations, reports, or calculations which might conflict with or limit the rights of the GOL (including without limitation the right of the GOL to make such data, measurements, interpretations, reports, or calculations public or to share the same with any third party) as set forth in this Annex.

#### 6. Standards

- a) This Annex C (and in particular, Appendix 2 hereto) adopts, integrates, and incorporates by reference, and has been developed with reference to, Applicable Laws and internationally recognised and widely accepted standards, tests, and parameters with respect to addressing environmental and social risks associated with the development of large-scale wind power projects ("Standards").
- b) The reference to, and application of, such Standards will assist the Parties to clearly understand what is required of the Company with respect to its performance of environmental and social obligations.
- c) The Company shall at all times comply with the Standards, unless:
  - (i) the Company has been granted an Exemption from the relevant Standard; or
  - (ii) the relevant Standard has been explicitly referred to and waived in writing by the GOL in response to a written request by the Company for such a waiver and asserting that such Standard is not applicable, and including in such written request the basis and rationale upon which such request is made.

#### 7. Approvals

No Authorizations granted to the Company by the GOL under this Annex C shall relieve the Company of any of its environmental or social obligations or other responsibilities hereunder, nor shall such grant create any responsibility or liability of the GOL with respect thereto.

#### 8. Limited by Scope and Limited by Budget

Notwithstanding anything in the Concession Agreement or this Annex to the contrary, the Company undertakes and agrees that:

- a) except for the budget for Capacity Building in Appendix 6 of this Annex C which shall be Limited by Cost, the Company's obligations to make payment for all of the other budgeted items under this Annex C shall be Limited by Scope;
- b) where uncertainty exists, or this Annex is silent as to whether the Company's obligations to make payment is Limited by Scope or Limited by Cost, such payment obligation of the Company shall be treated in all respects as one which is Limited by Scope; and
- c) in a case which is Limited by Scope, the receipt, review, or approval by the GOL of any budget that may be proposed by the Company shall not establish any limit on the Company's liability to pay what is necessary to complete the agreed scope, nor shall it cause the GOL to incur any financial or other liability in regard thereto.

#### 9. Rules on Budgets

- a) Budgeted amounts in Appendix 6 of this Annex C are in USD and, where Limited by Cost, shall be adjusted by the Lao CPI (the "Budgets"). The Budgets do not include any budget spent prior to the initialling of this Annex C.
- b) The Budgets and budgeted amounts in this Annex C which are identified as being Limited by Scope represent reasonable estimations only at the time of signing of the Concession Agreement, and do not establish a limit on the amount the Company may be required to expend on the item so identified. The Company shall provide increased funding in the amounts required as and when necessary to ensure the completion of all work that is Limited by Scope.
- c) A failure by the Company to pay the Budgets or any budgeted amount to the GOL or to make available any budgeted amount as otherwise provided in this Annex C in respect of any other Company obligation, as and when provided herein, shall be a breach of the Concession Agreement.
- d) Budgets set forth in this Annex C do not include any Company overheads (which the Company shall be obliged to pay), or the costs of compliance with environmental and social obligations of any entity other than the Company (including without limitation the Contractor, Subcontractor, and Operation and Maintenance Contractor during the Concession Period of the Project).
- e) No budget amounts provided in connection with this Annex C shall be regarded, claimed, treated, qualified, or accounted for as being part of any fees, royalties, taxes, charges, other imposts, or financial benefits of any kind that are or may become otherwise payable to the GOL under the Concession Agreement or Applicable Laws.
- f) The Community Development Programme (and its funding) as provided in Clause 4.18 of the Concession Agreement shall be used for the purposes as specified in the Concession Agreement only and, in no event, shall be used by the Company to satisfy any of its obligations under this Annex C (except livelihood restoration support) or be regarded or treated as the Company's performance of its obligations under this Annex C.

# 10. Budget Disbursement Procedure for GOL Counterpart Activities

- a) Based on the budgets to the GOL in Appendix 6 (Items III and VI), the Parties shall by 30 October each year agree on a disbursement plan for the Company's funding for the relevant GOL counterparts for its activities during the following calendar year relating to:
  - (i) environmental and social matters; and
  - (ii) compensation and livelihood restoration.
- b) At the end of each calendar year, the GOL shall submit to the Company a report indicating the completed tasks and the use of the corresponding budget with copies of supporting documents.
- c) The GOL may retain any unused funds as disbursed by the Company in any year for utilization by the GOL in subsequent year(s), as the GOL deems appropriate to be applied in accordance with the relevant budget line.
- d) The GOL shall undertake annual internal audits of the implementation of the disbursement plan, provided that, the cost for such internal audit shall be included in the budget provided by the Company.
- e) A copy of the final internal audit report shall be made available to the Company upon the Company's written request, and the Company shall have the right to carry out its own audit of the implementation of the disbursement plan and the use of funds bythe GOL, at the Company's sole expense.

#### 11. Environmental Protection Fund

The Company shall contribute the budget to the Environment Protection Fund listed in Appendix 6, Item [IV] for purposes to be determined by the Environmental Protection Fund according to the rules



and procedures of the Environmental Protection Fund. The Company shall provide the funds in annual instalments of USD 35,000.00 starting from PCOD and continuing until the end of the Concession Period, with a total of twenty-five (25) instalments amounting to USD 875,000.00.

# 12. Self-Monitoring by the Company

- a) The Company shall engage in continuous, pro-active, and comprehensive self-monitoring of the Company's activities, the Project, and activities related thereto, to ensure full compliance with its environmental and social obligations.
- b) The Company shall notify the MONRE or the Compensation Committee at Sekong and Attapeu Provinces (as applicable) as to any breaches or non-compliance by the Company with its environmental or social obligations as soon as reasonably possible, and in any event, in respect of any breach or non-compliance which would have a serious impact or where the urgent attention of the GOL is or may be required, within no later than twenty-four (24) hours of becoming aware of such breach, and in all other cases, within seven (7) business days of the Company becoming aware of such incident.
- c) The Company recognizes and acknowledges the importance to the GOL of the Company's comprehensive, timely, and accurate self-monitoring and reporting of the results thereof to the MONRE, which is intended to be the chief (but not exclusive) means of ensuring the Company's full compliance with its environmental and social obligations.
- d) If any GOL inspection identifies the existence of a breach or non-compliance by the Company which was not previously reported by the Company to the GOL in writing but which should have been so reported as provided in this Clause 12, then the GOL shall have the right to impose a penalty on the Company for such failure to report, in addition to any penalty that the GOL may impose on the Company with respect to such underlying breach or non-compliance according to Annex U (Penalties & Form of Penalty Guarantees).
- e) To ensure proper monitoring, the Company shall employ qualified, professional, and experienced experts and utilize other specialized resources and equipment as appropriate.
- f) The Company shall ensure that, except for the public release of information by the Company as otherwise required and permitted in this Annex C, any results of self-monitoring are not shared with any other entity or released in any way to the public until and unless the GOL has given its prior written approval to do so.

#### 13. Environmental and Social Management Office (ESMO)

The Company shall, within 45 days of the Effective Date, establish the ESMO to act as the focal point for the implementation by the Company of its environmental and social obligations throughout the Construction Period and the Operating Period. The ESMO shall:

- a) ensure compliance with the provisions of this Annex C and any related Authorizations to which the Company is obliged;
- b) ensure that the environmental and social obligations of the Company are properly reflected in its contracts and subcontracts;

- c) review and clear reports, plans, and other documents submitted by the Contractor and Subcontractor that are related to this Annex;
- d) perform site inspections and undertake monitoring of the performance of environmental and social obligations related to this Annex, and prepare and circulate relevant reports to internal and external stakeholders;
- e) liaise and cooperate with relevant GOL authorities and participate in joint inspections;
- f) document the implementation of all activities undertaken pursuant to this Annex to ensure compliance with its provisions;
- g) create and implement programs for all the budgeting and financial reporting for the operation of the ESMO;
- h) undertake or arrange such internal and external audits as may be necessary to comply with the related requirements of the Concession Agreement, this Annex C, and the relevant procedures of the Company; and
- be responsible for coordinating, managing, and monitoring the practical implementation of compensation activities undertaken pursuant to this Annex and ensuring the fulfilment by the Company of its obligations.

# 14. Structure and Resource Requirements of the ESMO

- a) The Company shall ensure that the ESMO is at all times adequately resourced and staffed so as to enable the Company to comply with its environmental and social obligations, including compensation obligations, and to that end, shall ensure that the staff of the ESMO have the necessary language skills and capacity so as to enable routine communication and reporting in the Lao language.
- b) During the Construction Period, the staff employed by the ESMO shall have, at a minimum, skill sets necessary to address the following subject areas:
  - (i) the environmental impacts of construction activities, including protection against soil erosion;
  - (ii) management of wastewater, solid waste, hazardous waste, and hazardous materials;
  - (iii) sampling and monitoring (e.g., for noise, dust, and water quality);
  - (iv) biodiversity conservation;
  - (v) communication, outreach, community liaison, and grievance redress mechanisms;
  - (vi) socioeconomic monitoring, livelihood restoration, community development, labor and working conditions, research, and data management;
  - (vii) capacity to provide oversight in implementing the ESMMP requirements and conduct environment audits to assess the Contractors and Subcontractor performance;
  - (viii) a compensation manager who shall be responsible for high level negotiation and consultation with PAPs, facilitating meetings, and managing and monitoring the overall performance of the CMU;
  - (ix) technical support staff with suitable qualifications to provide technical expertise and supervision for health, water supply and sanitation, education, civil works, agricultural extension, livelihood, community engagement, and research, and other services provided by the Company or its Contractors and Subcontractors to PAPs and host communities;
  - (x) a team that is capable of providing explanations of compensation policy, monitoring grievances, and alerting management to practical problems; and
  - (xi) other support staff and drivers.
- c) During the Operating Period, the ESMO staff shall have, at a minimum, the skill sets necessary to address the following subject areas:

- (i) water quality management and monitoring;
- (ii) noise monitoring and management;
- (iii) shadow flicker monitoring and management;
- (iv) livelihood restoration and community development;
- (v) labor and working conditions;
- (vi) forest and wildlife management;
- (vii) biodiversity management and monitoring;
- (viii) communication, outreach, community liaison, and grievance redress mechanisms; and
- (ix) socioeconomic monitoring, livelihood restoration, research, and data management.
- d) The office location(s), final structure, and resources of the ESMO shall be identified in the ESMMP-CP and ESMMP-OP and will therefore be subject to approval by the GOL.
- e) The Company shall ensure that the ESMO is at all times adequately resourced and shall ensure that the staff of the ESMO have the necessary Lao language skills to enable communication with PAPs and local authorities, whilst also considering issues of gender and ethnicity.
- f) The Company shall monitor the performance of the ESMO in terms of its ability to fulfil its obligations relating to compensation matters.

# 15. GOL Inspection

- a) The GOL shall be entitled to inspect the Site at any time with or withoutnotice to the Company to monitor compliance with the provisions of the Concession Agreement and this Annex. The detailed technical inspections will be monitored by the GOL.
- b) A GOL official exercising the power conferred under paragraph a) of this Clause 13 shall provide such official identification to the Company on request as necessary to demonstrate his or her right to exercise the power of a GOL inspector.
- c) The Company shall:
  - (i) at all times, facilitate GOL inspections undertaken pursuant to paragraph a) of this Clause 13 and shall require its Contractors and Subcontractors to provide access accordingly:
  - take all reasonable and prudent steps to mitigate any unsafe conditions in any restricted areas and shall provide such protective gear as it has available for use by the GOL during the course of such inspections;
  - (iii) ensure the presence at the site of interpreters or technically qualified personnel who are fluent in the Lao language and who are able to respond to questions from the GOL inspector; and
  - (iv) on being notified that a GOL inspection is being undertaken, ensure that appropriately qualified and identifiable personnel are made available to respond to any questions from the GOL inspector.
- d) In connection with any such GOL inspection, the Company shall promptly provide such data and information as may be requested by the GOL inspector in order to identify possible situations of non-compliance with the requirements of this Annex.
- e) The Company shall fund the GOL's inspection costs in accordance with the agreed budget.
- f) In addition to the GOL inspection, where:
  - (i) the GOL has an insufficient number of personnel to effectively monitor the Company's performance of its obligations in relation to the Project, or

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(ii) in the reasonable opinion of the GOL, the Company has failed to properly self-monitor orto report any material breach, non-compliance, violation, or performance failure of its obligations in relation to the Project identified as a result of its self-monitoring, then, in any such case, the GOL shall have the right to appoint one or more Monitoring Agency(ies) with relevant international experience in environmental auditing and monitoring, social commitments auditing and monitoring, health risks auditing and monitoring, or occupational safety and health risks auditing and monitoring, as the case may be.

# 16. Monitoring Agency(ies)

- a) The procurement by the GOL of such Monitoring Agency(ies) shall be carried out in accordance with suitable terms of reference and at the Company's cost as attached in Appendix 6. The Company may request to comment on such terms of reference. For the avoidance of doubt, the scope of services of the Monitoring Agency(ies) shall also include training the staff of the GOL in monitoring methodologies.
- b) The GOL will appoint such Monitoring Agency(ies) based solely on its evaluation of eligible bidders or candidates.
- c) The Monitoring Agency(ies) and its employees shall have no business or financial, personal, or other interest in the Company's activities, the Project, or any activities related thereto. No circumstance shall be allowed which might compromise the professionalism of the Monitoring Agency(ies) or of any employee of the Monitoring Agency(ies) in performing its tasks.
- d) The duration of the appointment of the Monitoring Agency(ies) shall be for so long as the GOL regards it to be necessary (and, at a minimum, until the Company's additional obligations related to the Project's activities that are subject to such monitoring shall have been fully met).
- e) The Monitoring Agency(ies) shall enter into a contract with the GOL, and shall at all times be under the sole direction and supervision of the GOL to (i) monitor the adequacy and effectiveness of the compensation Measures, (ii) design and set-up systems and tools, and conduct training to assist the MONRE to review, monitor, and check the implementation by the Company of the obligation under this Annex, and (iii) perform other services in the manner and timeline as requested by the GOL.
- f) The Company shall provide the Monitoring Agency(ies) with all relevant and all reasonably requested data, records, and other documentation in order to facilitate the effective monitoring and evaluation by the Monitoring Agency(ies)of the additional obligations related to the Project's activities.
- g) The Company shall bear all costs of the Monitoring Agency(ies) as attached in Appendix 6 utilized by the GOLpursuant to this Clause 13.
- h) The Monitoring Agency(ies) may, during the performance of services, provide reasonable advice and assistance to the Company to ensure the Company's compliance with additional obligations related to the Project's activities, provided that (i) such advice and assistance to the Company shall not create a conflict of interest with the primary obligation of the Monitoring Agency(ies) to provide auditing and monitoring services to the GOL, and (ii) copies of any documents provided in this regard shall also be provided to the GOL.
- i) Upon the completion of each evaluation, the Monitoring Agency(ies) shall submit reports to the GOL and the Company in accordance with the terms of references. Such monitoring reports shall be disclosed in accordance with this Annex C.

# 1.1: Occupational Health and Safety

### 17. Occupational Health and Safety

a) Immediately upon completion by the Company of the Health and Safety Plan required under Clause4.12 (b) of the Concession Agreement, the Company shall establish an Occupational



- Health and Safety Office ("OHSO") to implement the Health and Safety Plan and act as the focal point for health and safety issues throughout the Construction Period and the Operating Period.
- b) The Company shall require and ensure that the Contractors, Subcontractors, and Operation and Maintenance Contractorsestablish and implement their own health and safety organization in accordance with Applicable Laws and the occupational Health and Safety Plan of the Company.
- c) The mandate of the OHSO shall apply to all activities undertaken at the Site, including the activities of the Company, its Contractors, and Subcontractors.

#### d) The OHSO shall:

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- (i) identify and assess potential hazards to workers and local communities, including physical, chemical, biological, and radiological hazards;
- (ii) ensure compliance with relevant occupational exposure limits as stipulated in this Annex C and, for limits not stated in Annex C, to be determined in the Health and Safety Plan;
- (iii) provide adequate preventative and protective measures, including modification, substitution, or elimination of hazardous conditions or substances;
- (iv) develop and oversee the implementation of the Health and Safety Plan as well as other guidelines and procedures by the Contractors, Subcontractors, and Operation and Maintenance Contractors;
- (v) conduct regular training on health and safety to Company's employees, and the Contractors, Subcontractors, and Operation and Maintenance Contractors;
- (vi) conduct regular health and safety inspections and reporting of work practices, installations, and structures;
- (vii) conduct regular health and safety inspections and reporting of workplaces, accommodation facilities, and services to ensure that there are adequate hygienic and safe lavatory facilities (toilets and washing areas), adequate supplies of portable drinking water, clean eating areas, appropriate housing with adequate protection against heat, cold, damp, noise, fire, and disease-carrying animals (and, in particular, insects);
- (viii) establish and maintain medical facilities at the Site:
- (ix) establish emergency procedures and ensure that relevant emergency equipment is provided, maintained, and available for use at all times;
- (x) conduct regular health and safety risk assessments and report the results of such assessments to the Relevant Authority responsible for Health and Safety in accordance with Applicable Laws and Standards;
- (xi) ensure that all Company employees and Contractors and Subcontractors' employees are subject to a medical examination in accordance with Applicable Laws; and
- (xii) maintain a complete record of workplace incidents / accidents / near misses and occupational diseases and report these to the GOL.

### 18. Structure and resource requirements of the OHSO

- a) The Company shall ensure that the OHSO is at all times adequately resourced and staffed so as to enable the Company to comply with its obligations as specified in this Annex.
- b) The resource requirements of the OHSO, which may include inspectors, trainers, doctors, and other medical support staff, shall be proposed by the Company to the GOL for approval.
- c) The resource requirements of the OHSO may be reduced during the Operating Period taking account of the health and safety requirements at that stage in the Project.
- d) The Company shall fund its obligations relating to the OHSO in accordance with the budget specified in this Annex.

#### 19. Health and Safety Procedures

- a) The Company shall develop and implement the Health and Safety Plan, including subsequent procedures and internal labour regulations, throughout the life of the Project based on Applicable Laws and relevant Standards.
- b) The scope of the Health and Safety Plan shall include, but is not limited to:
  - (i) working practices during the Construction Period and Operating Period, including but not limited to operation of vehicles and road safety, safety barriers, working at heights, welding, working in confined spaces, managing hazardous materials (ANFO and oxygen acetylene tanks), crane and folk-lift operation, blasting procedures, emergency response and evacuation in case of natural disasters, including threats of landslides, rockfalls, face slumping, land collapse, structural failures, medical purposes and others reasons, and checkpoints and access control;
  - (ii) occupational exposure limits and a monitoring plan to ensure compliance; and
  - (iii) public safety issues during the Construction Period and the Operating Period including, but not limited to, road traffic and access to the Site.
- c) The Company shall develop a COVID-19 management plan ("COVID-19 Management Plan") to ensure the prevention, detection, control, and treatment of COVID-19 at the Site. The Company shall submit the COVID-19 Management Plan to the Implementing Agency of the GOL no later than 90 days after the Effective Date by(i) issuing an unlimited notice to proceed under the first Construction Contract, or (ii) commencement of any construction at the Site, whichever occurs first. The GOL shall review and consider the COVID-19 Management Plan and within sixty (60) days of receipt of the COVID-19 Management Plan, either grant approval thereof or reply to the Company in writing with any comments or recommended revisions. If the GOL recommends any revisions, the Company shall reflect the GOL inputs into a revised COVID-19 Management Plan and shall re-submit the COVID-19 Management Plan to the GOL for its approval. The COVID-19 Management Plan shall be updated and submitted to the GOL annually or at any earlier time upon the written request by the GOL in order to be in line and match with the risks, rules, and any instructions and/or policies issued by the GOL.
- d) The COVID-19 Management Plan shall, at a minimum, include processes and plans on the following topics:
  - (i) Site access control;
  - (ii) testing and health check-ups;
  - (iii) use of PPEs:
  - (iv) all workers for the Project should be required to have two doses of a recognised COVID-19 vaccine prior to entering the Site;
  - (v) maintenance of clean premises and provision of garbage bins with covers;
  - (vi) physical distancing at canteens, accommodation, and offices (mainly);
  - (vii) health facilities and health personnel, including the training of health personnel;
  - (viii) a compulsory mask mandate for all staff and workers;
  - (ix) regular monitoring of workers' temperature before starting daily work;
  - (x) provision of soap/hand sanitizing points where necessary in the construction camp/subcamp:
  - (xi) carrying out an awareness campaign on COVID-19 prevention to all staff and workers prior to the commencement of the construction work, after the award of the Construction Contract; and
  - (xii) compliance with any issue letter/order from the GOL about COVID-19 prevention measures.



#### 1.2: Rehabilitation Works

#### 20. Rehabilitation Works

- a) Promptly upon any temporary sites and ancillary facilities no longer being required by the Project, the Company shall:
  - (i) be responsible for all associated Rehabilitation Works costs;
  - (ii) carry out and complete Rehabilitation Works of any Project-impacted areas; and
  - (iii) de-commission such temporary sites and ancillary facilities in order to return the Project-affected area back to the condition of a functioning and productive ecosystem as defined in Annex H2 (Rehabilitation Works and Decommissioning Activities), compatible with a safe and healthy environment for human activities, taking into consideration what the final land use will be.
- b) The Rehabilitation Works shall ensure that the after-use of the rehabilitated components of the Project are compatible with and complementary to the surrounding use of land and natural resources and functions by the people living in the vicinity of the Project.
- c) Such Rehabilitation Works shall be scheduled and specified in the ESMMP-CP or the ESMMP-OP, as the case may be, in compliance with the Standards.

#### 1.3: Environmental And Social Management System

#### 21. Objectives and Standards of the ESMS

- a) The objectives of the ESMS shall be:
  - (i) to identify and evaluate the environmental and social risks and impacts of the Project;
  - (ii) to adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate or offset for risks and impacts to workers, Affected Communities, and the environment;
  - (iii) to promote improved environmental and social performance;
  - (iv) to ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately; and
  - (v) to promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them, and to ensure that relevant environmental and social information is disclosed and disseminated.
- b) The Company shall prepare and implement its ESMS in compliance with the Standards. The Company shall demonstrate conformity with the international standard for Environmental Management Systems (ISO 14001:2015) or another relevant standard approved by the MONRE by seeking certification/registration of its environmental management system. The first registration audit shall be carried out no later than three (3) years after the commencement of construction, and the ESMS certification shall be carried out no later than two (2) years after the commencement of construction. The Company shall arrange audits of the ESMS every five (5) years to be carried out by an external qualified organization that has been approved by the MONRE to undertake such a task. The Company shall provide the MONRE with the annual audit reports.
- c) The Company shall prepare and implement its ESMS in a manner which.



- (i) ensures compliance with the ESIA, ESMMP, ESMMP-CP, ESMMP-OP, Compensation Plan, Livelihood Restoration Plan, relevant Authorizations, and the Standards;
- (ii) ensures regular, comprehensive updating of the Project's environmental aspects and impacts on a schedule not less frequently than annually;
- (iii) ensures continuous improvement and effective implementation of the Measures through clear developed objectives, time-scaled targets, action plans, and post-action reviews and adjustments;
- (iv) ensures continuous monitoring of the implementation of the Measures as defined in the ESMMP, with quarterly reporting of the findings to the MONRE;
- (v) ensures continuous monitoring of environmental impacts during the construction and operation of the Project, with quarterly reporting of the findings to the MONRE;



- (vi) ensures that all documentation and records relating to environmental matters are complete, correct, and not misleading in any material respect, and that such documentation and records are maintained in both paper and digital versions or copies, with appropriate and secure off-site back up / redundancy to minimize the risk of loss from accidents or otherwise;
- (vii) ensures that necessary operational plans and procedures, including those for emergency response, are developed and implemented, and advises the GOL in writing of such operational and emergency response plans and procedures;
- (viii) ensures comprehensive and effective environmental training and awareness raising of employees, Contractors and Subcontractors, and consultants;
- (ix) ensures proper communication and internal and external reporting; and
- (x) ensures prompt and effective implementation of corrective measures to bring deficient performance of the Company's obligations into full compliance with the Standards and to remedy Adverse Impacts arising from any incidents of non-compliance.
- d) The Company's ESMS shall contain, at a minimum, the following elements:
  - (i) environmental and social policy, including environmental communication policy;
  - (ii) environmental and social obligations, including objectives and targets;
  - (iii) comprehensive inventory of all environmental aspects and impacts of the Company's activities and the Project;
  - (iv) register of legal and other environmental requirements contained within all applicable Standards;
  - (v) references as relevant to action plans and programs in the ESMMP-CP and ESMMP-OP, Compensation Plan, and Livelihood Restoration Plan:
  - (vi) training plans;
  - (vii) organization with defined roles and responsibilities;
  - (viii) procedure for the identification, maintenance, copying, digitizing, entry into database, protection, and retrieval of all ESMS documents and the submission of copies as required to the GOL;
  - (ix) procedures for quarterly and annual review, updating, and reporting of the Project's environmental aspects, impacts, and regulatory requirements;
  - (x) procedures for continuous monitoring and registering of the environmental impacts and the environmental performance of the Project, including without limitation, the recording and self-reporting of all violations of Standards, Measures, and Authorizations;
  - (xi) procedures for effective communication of the ESMS to employees, clients, Contractors, suppliers, the GOL, and other stakeholders;
  - (xii) procedures to ensure that effective training, competency checks, and environmental awareness are continuously reviewed and updated to meet changing needs and any additional Standards;
  - (xiii) procedures for accurately, rapidly, and effectively identifying and responding to emergency situations in order to ensure protection of personnel, safety measures for stakeholders, and the avoidance, minimization, remediation, and compensation of environmental impacts;
  - (xiv) procedures to ensure that operations and activities are conducted strictly in compliance with the Standards and generally in a manner which is capable of effectuating and achieving the environmental policy, objectives, and targets of the Company;

- (xv) procedures for promptly and fully implementing all necessary corrective measures to attain compliance with the Standards and the Company's environmental and social obligations set forth in this Annex C;
- (xvi) procedures for effective, regular, and timely internal and external environmental communication; and
- (xvii) procedures for self-auditing of the ESMS and of the environmental performance of the Project, and to accommodate the GOL's audit (through its own officials or utilizing an independent environmental auditor), as provided elsewhere in this Annex C.

#### 22. Specific Management Plans

These plans and programs shall include objectives and time-scaled targets. They shall identify, map, and describe project operations and schedules. They shall clearly identify and characterize impacts and risks and their causes/possible causes, and include plans and measures to ensure full compliance with the Standards, including emission limit values for discharges to water and air, quantities of such discharges, waste management, ambient water, air and noise limits or standards, and any other measures necessary for environmental protection.

The plans and programs shall contain all necessary engineering drawings, specifications, layout plans, location maps, cross-sections, transects, aerial photos, and satellite imagery. Such items shall be in proper scale and layout design for use by managers, field officers, and regulators (MONRE Officers).

Staffing, qualifications, and responsibilities for project operations, monitoring, checking, and control shall be clearly accounted for.

- landfills management plan;
- subplan for Contractors, in accordance with the ESMMP; and
- transmission line corridor management plan.

Same requirements as for the Site and area specific plans and programs.

- biodiversity and wildlife/ management;
- hazardous substances management;
- solid waste management;
- transport, traffic and road safety;
- emergency management and planning;
- capacity building plans and programs;
- labour and personnel management;
- occupational health and safety;
- community health and safety; and
- m others.

# 23. Environmental and Social Management and Monitoring Plan – Construction Period (ESMMP-CP)

- a) Company's Construction Period Responsibilities. During the Construction Period, the Company shall be responsible for the full and effective implementation of all requirements specified in the ESMMP-CP and for mitigating any unforeseen impacts of the Project.
- b) **ESMMP-CP Approval and Permit**. The Company shall submit the ESMMP-CP together with the Company's application for approval of the ESMMP-CP and associated Authorizationsin respect thereof. The Company shall obtain the required Authorizations and approval of ESMMP-CP from the MONRE.
- c) ESMMP-CP Preparation and MONRE Approval. The Company shall prepare the ESMMP-CP and submit it to the MONRE for review no later than ninety (90) days prior to issuing an unlimited notice to proceed under the Construction Contract. The ESMMP-CP shall comply fully with the Company's approved ESMMPs, ESIA, ESMS, and applicable Standards, and shall establish the scope and serve as the basis for requirements to avoid,



alleviate, mitigate, remedy, and/or compensate/offset the Project's AdverseImpacts during the Construction Period. The MONRE shall review and consider the ESMMP-CP and within sixty (60) days of receipt of the ESMMP-CP, either grant the MONRE's approval thereof or reply to the Company in writing with any comments or recommended revisions. If the MONRE recommends any revisions, the Company shall reflect the MONRE inputs into a revised ESMMP-CP and shall re-submit the ESMMP-CP to the MONRE for its approval.

- d) The Company shall start construction of the Project Facilities afterit has obtained MONRE's approval of the ESMMP-CP.
- e) Iterative ESMMP-CP Process. The Company's first ESMMP-CP shall be prepared by incorporating therein the Company's Measures. The first ESMMP-CP shall govern the construction activities of the Contractors and Subcontractors. Continuous revision of the ESMMP-CP and the incorporation of Measures shall be conducted throughout the Construction Period.
- f) Approval of ESMMP-CP. The Company's ESMMP-CP shall be updated and submitted for the MONRE's review and approval every two (2) years.
- g) Inclusion in Construction Contracts. The Company shall include all relevant Standards together with any other environmental measures and requirements specified in the ESMMP and ESMMP-CP into its Construction Contract specifications, and shall ensure that such Standards, Measures, and requirements are fully and properly implemented by Contractors and Subcontractors.
- h) Content of the ESMMP-CP. The Company shall prepare the ESMMP-CP substantially in accordance with the requirements in Appendix 3.
- i) Contractors Compliance with Company's ESMS. The Company shall cause, and shall be responsible to ensure that, the Construction Contractors shall perform in compliance with the Company's own ESMS throughout the Construction Period.
- j) Basis for Contractors' EMMPs. The Company shall ensure that the Construction Contractors' EMMP for the Construction Period is prepared in accordance with the Standards, the ESMMP, the ESMMP-CP, Concession Agreement, Authorizations, and this Annex C.
- k) Contractors' EMMPs Detailed Obligations. In order to avoid, alleviate, mitigate, remedy, or compensate or otherwise address the Project impacts within the construction areas/Site and in any other areas impacted by the Company's activities or the Project, the Company shall ensure that each Construction Contractor comprehensively and properly covers in its Contractors' EMMP its detailed obligations with respect to each of the following activities (insofar as may be applicable to each particular Construction Contract) in accordance with applicable Standards:
  - (i) meeting all effluent standards, all air quality requirements for discharges into the air, and all water quality requirements for discharges into surface waters and groundwater;
  - (ii) avoiding and controlling erosion and sedimentation;
  - (iii) managing on-site traffic to eliminate where possible, and otherwise to minimize, dust and vehicle exhaust;
  - (iv) meeting ambient noise, dust, air-blast, and non-dust emission standards:
  - (v) managing Contractor's Project-related off-site traffic and meeting all ambient and emission standards;
  - (vi) providing archaeological and heritage site protection and relocation as necessary;
  - (vii) landscaping, rehabilitating, and re-vegetating the construction areas/Site;
  - (viii) managing on-site waste and hazardous waste;
  - (ix) managing Project-related off-site waste in compliance with the Authorizations;
  - (x) managing Project-related hazardous materials, oil / lubricants, and chemical substances; and developing and managing emergency plans for environmental incidents;

- (xi) surveying and detecting UXOs and, where UXOs are detected, rendering them safe by expert removal and destruction or by expert in-situ destruction;
- (xii) implementing a program for construction worker education in environmental issues;
- (xiii) implementing a health and safety program for all persons engaged in construction works; and
- (xiv) implementing a health education and disease prevention program for construction camp followers.

### 1.4: Construction Period Reporting

- a) Starting from the commencement of the Construction Works and continuing until the achievement of the taking over of the last Section of the Project Facilities, the Company shall prepare and submit monthly to the MONRE reports (in a form to be agreed with the MONRE) covering, at a minimum, the following items:
  - (i) the extent of the implementation of the Measures compared against the planned and approved implementation program;
  - (ii) all difficulties and obstacles encountered in implementing the Measures, the causes thereof, proposals for avoiding, minimizing, or remedying such difficulties and obstacles, and an indication of which proposals have been implemented and the progress to date;
  - (iii) all violations of / failures to comply with the Company's obligations set forth in the Measures, including for each a description of what led to the violation / failure, what steps the Company has taken to remedy such defect in performance, the date on which such violation / failure was first reported to the MONRE, and what steps the Company has taken to address the underlying cause of such violation / failure to avoid any recurrence thereof:
  - (iv) unexpurgated copies of all sections of the original reports from the Contractor that deals with Measures or otherwise addresses environmental or social obligations;
  - (v) any and all accidents or incidents that relate to the health, safety, and welfare of the Company staff and employees, Contractor and Subcontractors, PAPs, or any other visitors to the Project or affecting the environment; and
  - (vi) data obtained through the monitoring of environmental parameters and social conditions as committed in the ESIA / ESMMP.

# 24. Environmental and Social Management and Monitoring Plan - Operating Period (ESMMP-OP)

- a) Company's Operating Period Responsibilities. During the Operating Period, the Company shall be responsible for the full and effective implementation of all requirements specified in the ESMMP-OP and for the mitigation of any unforeseen impacts caused by the Project during the Operating Period.
- b) Operating Period ESMMP (ESMMP-OP). The Company shall submit the ESMMP-OP to the MONRE for review no later nine (9) months prior to Scheduled Project Commercial Operation Date. The ESMMP-OP shall comply fully with the Company's approved ESIA and ESMMP and all applicable Standards, and shall establish the scope and serve as the basis for all implementation requirements, in order to avoid, alleviate, mitigate, remedy, or compensate/offset the Project'sAdverse Impacts during the Operating Period. The MONRE shall review and consider the ESMMP-OP and within sixty (60) days of receipt of the ESMMP-OP, either grant the Authorization approving the ESMMP-OP or reply to the Company in writing with any comments or recommended revisions. If the MONRE recommends any revisions, the Company shall reflect the MONRE's inputs into a revised ESMMP-OP and shall re-submit the ESMMP-OP to the MONRE for its approval before achieving PCOD.

- c) The Company shall not start operations until it has obtained the MONRE's approval of the ESMMP-OP.
- d) **Approval of ESMMP-OP**. The Company's ESMMP-OP shall thereafter be submitted for MONRE review and approval every five (5) years.
- e) Inclusion in Operating Period Contracts. The Company shall include the relevant Standards together with any other environmental measures and requirements specified in this Annex C and the approved ESMMP-OP into any Operation and Maintenance Contracts, any waste handling contractor arrangements, and all other contracts for the performance of work by any Contractor during the Operating Period, and shall ensure that such Standards, Measures, and other requirements are fully and properly implemented by the Project operator and/or Operation and Maintenance Contractor and any such vendors, Contractors, and Subcontractors active during the Operating Period of the Project.
- f) Contractors' Compliance with Company's ESMS. The Company shall cause, and shall be responsible to ensure that, any Contractor and Operation and Maintenance Contractor active during the Operating Period shall perform in compliance with the Company's own ESMS throughout the Operating Period.
- g) Basis for Contractors' EMMPs. The Company shall ensure that all Contractors' EMMPs for the Operating Period are prepared in accordance with the Standards, the ESMMP, the ESMMP-OP, the Concession Agreement, Authorizations, and this Annex C.
- h) Contractors' EMMPs Detailed Obligations. In order to avoid, alleviate, mitigate, remedy, or compensate or otherwise address the Project's Adverse Impacts within the Impact Areas, the Company shall ensure that all Contractors, Subcontractors, and Operation and Maintenance Contractors active during the Operational Period comprehensively and properly cover in their respective Contractors' EMMP detailed obligations with respect to each of the following activities (insofar as may be applicable to each particular contract) in accordance with applicable Standards:
  - (i) meeting all effluent standards, all air quality requirements for discharges into the air, and all water quality requirements for discharges into surface waters and groundwater;
  - (ii) avoiding and controlling erosion and sedimentation;
  - (iii) managing on-site traffic to eliminate where possible, and otherwise to minimize, dust and vehicle exhaust;
  - (iv) meeting ambient noise, dust, air-blast, and non-dust emission standards;
  - (v) managing that Contractor's Project-related off-site traffic and meeting all ambient and emission standards;
  - (vi) providing archaeological and heritage site protection and relocation as necessary;
  - (vii) landscaping, rehabilitating, and re-vegetating Impact Areas;
  - (viii) managing on-site waste and hazardous waste;
  - (ix) managing Project-related off-site waste in compliance with the Authorizations;
  - (x) managing Project-related hazardous materials, oil / lubricants, and chemical substances;
  - (xi) developing and managing emergency plans for environmental incidents;
  - (xii) implementing a program for worker education in environmental issues; and
  - (xiii) implementing a health and safety program for all persons engaged in Project-related work; and implementing a health education and disease prevention program for work camp residents.
- i) **ESMMP-OP Contents.** The Company shall prepare the ESMMP-OP substantially in accordance with the requirements in Appendix 3.

### 1.5: Operating Period Reporting

- a) Starting from the PCOD and continuing until the end of the Concession Period, the Company shall prepare and submit every six (6) months to the MONRE reports (in a form to be agreed with the MONRE) covering, at a minimum, the following items:
  - (i) the extent of the implementation of the Measures compared against the planned and approved implementation program;
  - (ii) all difficulties and obstacles encountered in implementing the Measures, the causes thereof, proposals for avoiding, minimizing, or remedying such difficulties and obstacles, and an indication of which proposals have been implemented and the progress to date;
  - (iii) all violations of / failures to comply with the Company's obligations set forth in the environmental Measures, including for each a description of what led to the violation / failure, what steps the Company has taken to remedy such defect in performance, the date on which such violation / failure was first reported to the MONRE, and what steps the Company has taken to address the underlying cause of such violation / failure to avoid any recurrence thereof;
  - (iv) unexpurgated copies of all sections of the original reports from the Contractors active during the Operational Period that deal with environmental Measures or otherwise address environmental or social obligations of such persons;
  - (v) any and all accidents or incidents that relate to the health, safety, and welfare of the Company staff and employees, Contractor and Subcontractors active during the Operating Period, PAPs, or any other visitors to the Project or affecting the environment; and
  - (vi) data obtained through the monitoring of environmental parameters and social conditions as committed in the ESIA / ESMMP; and
  - (vii) instances of traffic accidents or near misses, wildlife road kills, road damages, and daily traffic volume and mix.

# 1.6: Community Health Impacts

- a) The Company shall throughout the Operating Period ensure that monitoring is undertaken for the successful management and mitigation of impacts relating to Affected Communities, in accordance with a detailed monitoring program.
- b) Detailed mechanisms for the implementation of the Company's obligations pursuant to this Clause 21 shall be set out in the ESMMP-OP.

#### 1.7: Public Information System

- a) The proposed elements of the public information system shall be set out in the ESMMP-OP and subject to approval by the GOL.
- b) Elements of the public information system may include radio announcements, the use of mobile telephones, the internet, and all other suitable and appropriate means of preventing harm to Affected Communities.
- c) The effectiveness of the public information system shall be evaluated in the course of periodic reviews of the ESMMP-OP.

#### 1.8 Biomass Clearance

- a) In order to minimize the environmental impacts during forest clearance and biomass removal for the Project, including impacts on biodiversity, the Company shall:
  - (i) coordinate with provincial Department of Agriculture and Forestry of Sekong and Attapeu Provinces and other concerned parties to conduct the all-trees survey and registration after the Project is approved. The survey shall include economically high



value trees existing in the Project area, includingon access roads. The harvesting of economically high value trees will be done by a selected contractor. Prior to starting harvesting economically high value trees, the contractor shall directly consult with the relevant provincial Department of Agriculture and Forestry regarding tree managementand classification based on their economic value. After that the contractor shall request approval from the district administrative office before starting the harvesting;

- (ii) prepare a detailed forest clearance and biomass removal plan prior to the commencement of logging activities, which shall include the arrangement of compartments in such a manner that relatively undisturbed and contiguous habitats will be left, to the extent practicable, to allow and encourage the passage of wildlife out of the area;
- (iii) to the maximum extent possible, avoid construction of roads or tracks that would generate access to sensitive habitats hitherto difficult to access;
- (iv) ensure the provision of adequate habitat corridors to permit safe animal migration out of the forest clearance and biomass removal area prior to cutting and salvage work;
- ensure that Company employees, Contractors and Subcontractors are expressly prohibited from hunting, buying, or trading wildlife as well as collecting timber and non-timber forest products; and
- (vi) ensure that logging is conducted as quickly as possible to minimise related negative impacts such as hunting by contract workers and third parties.

- b) In order to take account of the safety and interests of local communities, the Company shall plan and implement salvage logging and biomass removal, the Company shall:
  - (i) take into consideration sensitivities regarding cultural sites and community events;
  - (ii) ensure that the burn off of biomass waste is done in a controlled manner by planning safety measures such as fire breaks;
  - (iii) ensure that biomass removal is minimised to reduce potential environmental issues such as increased air quality impacts, erosion and water quality impacts, as well as the generation of greenhouse gas emissions;
  - (iv) ensure that the management of biomass waste as a result of logging operations and biomass removal is clarified, agreed upon, and implemented under the supervision of the ESMO;
  - (v) ensure that necessary resources are provided to establish community forest organisations in Affected Communities which have rights to collect resources such as firewood and "lesser valued" timber from the inundation area before logging takes place, and that these resources are fairly divided between local community groups on the basis of meetings between Affected Communities and representatives from the Project owner;
  - ensure that labour inputs by local villagers in the development and implementation of the biomass clearance plan are maximised;
  - (vii) implement community safety measures along all access roads associated with salvage logging and biomass removal activities; and
  - (viii) conduct environmental education and awareness programs for all Project staff prior to construction to improve understanding of biodiversity conservation, cultural sensitivities, and the importance of forest resources for AffectedCommunities, and also to ensure that the prohibitions and penalties regarding hunting, wildlife trade, and the collection of other forest resources are widely known.
- c) In order to respect cultural or archaeological sites or to minimize or mitigate harm to such sites, in the context of logging, biomass clearance, and construction activities, the Company shall:
  - (i) undertake detailed archaeological surveys of all construction areas, particularly quarries, borrow pits, and spoil disposal areas prior to construction;
  - (ii) conduct inductions regarding the protection of archaeological and cultural heritage values for all staff and contractors on Site;
  - (iii) develop and implement a 'Chance Find Procedure' for all construction work in accordance with Applicable Laws;
  - (iv) prevent the sale of stone tools and any other artefacts to private collectors;
  - (v) ensure that sites identified in the ESMMP are marked on construction maps so as to prevent accidental disturbance of culturally significant sites, due to changes in the location of site infrastructure or waste and spoil disposal;
  - (vi) ensure that campaigns of public information and education on the protection of archaeological and cultural heritage are conducted by producing audio-visual and printed materials and organising village meetings, and ensuring that local educators are trained and provided with the means or carrying out their activities;
  - (vii) provide on-going support to the Department of Heritage, Ministry of Information and Culture to implement the acquisition policy developed during the Construction Period;
  - (viii) in cases identified as having substantial cultural or archaeological heritage impacts, support the Department of Heritage, Ministry of Information and Culture to establish a local museum to display artefacts from the area; and

(ix) set up a grievance procedure that will allow the investigation and resolution of complaints relating to archaeological and cultural heritage matters.

# PART II: SPECIFIC ENVIRONMENTL AND SOCIAL OBLIGATIONS

#### 2.1: AirQuality, Noise, Vibration, and Blasting

#### 25. Air Emissions

- a) In order to prevent or minimize air pollution on Site and nuisance to surrounding communities as a result of dust emissions during the Construction Period, the Company shall ensure that:
  - (i) methods and plans are proposed to mitigate the impact of the dust from activities related to construction, including raw material excavating sites, stone milling plant and concrete mixing plant, earthwork as road construction, material transportation, and activities in worker camps. The simplest measure to control dust shall be to water or to take other similar measures. This must also be applied if necessary to control dust from unpaved roads within the Site and from public roads caused by vehicle transportation in largely cleared areas and other dusty areas;
  - (ii) roads within the Site are sealed and dirt roads are periodically watered using water carts to minimize the generation of dust;
  - (iii) obsolete roads, meaning roads in the Site that are no longer needed, are ripped and revegetated unless they are to be made available for community use;
  - (iv) a 20 km speed limit within the Site and through villages on approach roads to the Site is implemented and enforced;
  - (v) land clearing and topsoil removal is kept to a minimum, and cleared land is rehabilitated as soon as practicable;
  - (vi) activities such as loading and dumping of topsoil and spoil are not undertaken during high winds;
  - (vii) top soil stripping is conducted at times when soil moisture can be expected to be optimal to minimize dust formation, failing which, water shall be applied during topsoil stripping;
  - (viii) access tracks used by topsoil stripping and spoil transport equipment are watered during their loading and unloading cycle;
  - (ix) long term topsoil stockpiles that are not used for a period of more than six (6) months are re-vegetated;
  - (x) dust aprons are lowered during drilling;
  - (xi) drills are equipped with dust extraction cyclones or water injection systems;
  - (xii) water injection or dust suppression sprays are used when high levels of dust are being generated, including during the course of aggregate crushing, batching, and other construction activities;
  - (xiii) dust monitoring is undertaken at relevant construction and receptor sites to be identified in the ESMMP-CP to assess the effectiveness of the management and mitigation measures;
  - (xiv) a grievance procedure is set up that will allow the investigation and resolution of complaints from Affected Communities relating to dust pollution or nuisance.
- b) In order to prevent air pollution from vehicles during the Construction Period, the Company shall ensure that:

- (i) exhaust gas from cars and construction machines, is acceptable. However, the machines will be checked and upgraded as required to reduce the level of pollution;
- (ii) if using machines underground is required, proper air circulating measures are required to control concentrations of pollutants, which increase up to three times the maximum level as set forth by WHO for "clean air";
- (iii) it may need to further improve air-circulating underground to limit reaction with poisonous gas from spaces of rock dug if the concentrations of pollutants increases up to three times the maximum levels as set forth by WHO for "clean air";
- (iv) burning waste will be taken within the determined area or at least five km away from nearby villages or as agreed by the responsible local authority, and in accordance with Applicable Laws and the Contractors' EMMP. Burning any materials which will create poisonous gas shall not be permitted.
- (v) vehicles used in the Project area are subject to verified periodic maintenance in accordance with the manufacturers' instructions;
- (vi) the tyre pressure of vehicles used in the Project Area must be monitored on a weekly basis and adjusted in accordance with the manufacturers' instructions;
- (vii) vehicles are prohibited from idling in residential areas, and the engines of vehicles must be turned off when such vehicles are parked near residences, offices, or eating areas;
- (viii) that diesel with the lowest sulphur content commercially available in the Lao PDR is used;
- (ix) proper driving instructions are provided to drivers and operators that shall also increase awareness of the importance of engine maintenance;
- (x) the passage of traffic through residential areas is properly managed to prevent vehicles from making sudden stops and starts;
- (xi) air emissions for all of the Project'svehicles do not exceed the limits inApplicable Laws;
- (xii) Project vehicles are fitted with secure dust covers and are regularly maintained to reduce roadside engine emissions;
- (xiii) that vehicle emissions are in compliance with applicable Lao PDR emission standards; and
- (xiv) a grievance procedure is set up that will allow the investigation and resolution of complaints from Affected Communities relating to air pollution from vehicles.
- c) In order to ensure the protection of local communities from blasting, the Company shall:
  - (i) engage a qualified UXO clearance organization in advance of any land and river ground preparation;
  - (ii) identify a blast exclusion zone (of not less than 400 m diameter) around the blast area;
  - (iii) ensure that prior to blasting, the exclusion zone is clear by patrolling the zone, posting signs (in the Lao language), and/or physically demarcating the zone;
  - (iv) ensure that prior to blasting, villages / Affected Communities within the vicinity of the exclusion zone, or those who use the land within the exclusion zone are alerted;
  - (v) implement access controls along construction roads prior to blasting to ensure that no un-authorised vehicles, pedestrians, or domestic animals are present in the exclusion zone;
  - (vi) ensure that a record is kept of every blast that produces fly-rock that travels further than 200 m, which record should state the perceived cause of this fly-rock;
  - (vii) ensure that a public education program regarding community safety issues associated with blasting is conducted; and

- (viii) ensure the visual monitoring of fly-rock to confirm that the exclusion zone adequately protects community and worker safety.
- d) In order to prevent or minimize nuisance to surrounding communities as a result of blasting activities, the Company shall ensure that:
  - (i) blasting is conducted at fixed times during the daytime between 09:00 and 17:00;
  - (ii) the number of explosive charges per blast hole shall not exceed the estimated maximum charge weight per delay;
  - (iii) only one charge shall detonate per delay and every charge shall be able to break and displace its burden with reasonable ease;
  - (iv) burden distances are sufficient;
  - (v) the premature ejection of stemming columns does not occur;
  - (vi) inter-row delays are long enough to give good progressive relief of burden;
  - (vii) detonating cord trunk-lines are used only to fire pre-split blasts and that these trunk-lines have a core load of only 5 g/m, and are covered by at least 250 mm of sand; and
  - (viii) a grievance procedure is set up that will allow the investigation and resolution of complaints from Affected Communities relating to blasting activities.

#### 26. Noise Emission

In order to prevent noise nuisance, the Company shall:

- (i) ensure the noise volume from construction machinery and vehicles will comply with regulations or standards with the same application;
- (ii) ensure volume mutters and other volume controllers will be used to control the noise from construction machinery. Vehicles must be repaired or replaced when they are out of service;
- (iii) ensure construction activities may only run 24 hours per day if there is a distance of at leastone km (or other distance as agreed) from villages and worker camps. Work in some areas may only be carried out from 6:00 to 18:00;
- (iv) ensure workers working in an environment with a noise volume of 80 dB or more must have ear protection in accordance with the requirements of the noise control plan;
- (v) ensure noise from plant and equipment shall not exceed international requirements for similar engine and activities;
- (vi) ensure the use of access routes with minimal traffic and roadside infrastructure:
- (vii) locate noisy infrastructure and equipment, as far as possible, in areas with natural noise attenuation barriers as a result of topography or vegetation, and ensure that acoustic enclosures for equipment casing radiating noise are installed:
- (viii) ensure that stationary noise sources (such as generators) that generate noise levels well above background levels (i.e., 70 dB(A) and above) are set back as far as possible from labour camps and noise sensitive receptors;
- (ix) ensure that construction activities are phased by completing construction in specific areas before moving to other areas so that the timeframe for localised noise impacts is as short as possible;
- (x) plan the location of fixed installations (such as aggregate crushing plants and concrete batching plants) and haul roads taking into consideration the potential for lowering the propagation of intrusive noise to sensitive receptors by taking actions such as: (i) maximising the distance between noisy activities and sensitive receptors, (ii) using natural sound barriers, (iii) installing noisy equipment behind structures acting as sound barriers, and (iv) orienting noise emissions away from sensitive receptors;

- (xi) plan the location and design of labour camps to ensure minimal exposure of the workers to offensive noise from construction activities;
- (xii) jointly agree with Affected Communities on noise recording measurement points and their recording in the ESMMP-CP;
- (xiii) ensure that noisy operations are to occur during the same time period, if possible;
- (xiv) ensure the use of construction methods that minimize noise pollution, including the use of specially quieted equipment, noise treatment measures on equipment, and the selection of low noise construction methods as identified in the ESMMP-CP;
- (xv) ensure that reversing vehicles operating in noise-sensitive areas are fitted with smart alarms so as to minimize noise intrusiveness;
- (xvi) ensure that noise control options such as silencers and mufflers are fitted to exhausts, radiators, compressors, and fans for construction equipment (such as hydraulic excavators, bulldozers, graders, loaders, and trucks);
- (xvii) ensure the identification in the ESMMP-CP and use of equipment with lower sound and power levels;
- (xviii) ensure the hours of operation for mobile sources operating through community areas are limited and take place only during daylight hours; and
- (xix) set up a grievance procedure that will allow the investigation and resolution of complaints from Affected Communities relating to noise nuisance issues.

# 2.2: Protection of Biodiversity

# 27. Protection of Terrestrial Biodiversity

- a) To protect terrestrial biodiversity, the Company shall design, construct, and operate the Project so as to give effect to the provisions in this Clause 24.
- b) The Company shall take all reasonable steps to ensure that sites for the Project Facilities are planned, designed, and situated so as to minimize the impacts of the Project on terrestrial biodiversity.
- c) Prior to the start of construction activities, the Company shall ensure that a detailed study of biodiversity (flora and fauna) is carried out in the Project area of influence, including areas surrounding the wind towers, transport routes for construction materials, and transmission line corridors. The survey shall be carried out by duly qualified specialists in the local flora and fauna. The survey shall include the identification of habitats and fauna and flora species of conservation value and estimates of population abundances, animal migration patterns, migratory birds in the vicinity of the Project, and determine detailed measures to protect and manage biodiversity in these areas.
- d) The Company shall ensure that Project components, including Project Facilities, camps, depots, quarries, borrow pits, and disposal sites are established in locations that will minimise their environmental risks and impacts and during the clearing for camps and other Project construction areas, stockpile topsoil to enable the rehabilitation of these areas after these areas are no longer in use by the Project.
- e) The Company shall ensure that transmission line alignments do not pass through any existing or proposed protected areas unless completely unavoidable and where appropriate offsetting is provided.
- f) The Company shall ensure that access roads are designed and constructed to ensure that the movement of terrestrial fauna is possible at regular intervals along the road.
- g) The Company shall ensure the appropriate design of infrastructure to minimise erosion and potential disturbance to drainage lines.



- h) The Company shall ensure that vegetation clearing is timed to avoid the mating, breeding, and nesting cycles of relevant threatened fauna species, where practicable.
- i) Where practicable, the Company shall ensure that cleared vegetation material is mulched and mixed with topsoil for subsequent use for rehabilitation and revegetation.
- j) The Company shall maximise the use of seed and propagation material from existing indigenous native grasses, herbs, shrubs, and trees, and ensure that recoverable viable seed is collected prior to clearing and used for revegetation.
- k) The Company shall monitor all incidents involving wildlife (including vehicle accidents, conflicts with humans, poisoning of fauna, etc.) and improve management measures accordingly.
- The Company shall minimize the noise and vibration impacts on wildlife and ensure that all
  equipment incorporates industry standard noise reduction systems and complies with
  applicable noise standards.
- m) The Company shall plan and construct internal roads and roads to disposal sites, quarries, and borrow pits so as to avoid, to the maximum extent possible, areas of high ecological, cultural, economic, and aesthetic value and sensitivity.
- n) The Company shall ensure the minimisation of vegetation and habitat loss and the restriction of land clearance to only the land required for Project components.
- o) The Company shall prohibit the use of burning to clear and control vegetation.
- p) The Company shall ensure that the clearance of buffer zones around Project infrastructure is minimised where possible.
- q) The Company shall ensure that sensitive habitats near construction areas are designated and clearly marked as 'no go' areas.
- r) The Company shall ensure that Project staff and Contractors and Subcontractors are prohibited from hunting, buying, or trading wildlife and from the collection of timber and non-timber forest products, to help conserve the existing fauna and forest resources.
- s) The Company shall ensure that environmental education and awareness programs are conducted for all Project staff immediately upon employment/contracting and with regular intervals thereafter to improve their understanding of biodiversity conservation and the importance of forest resources for Affected Communities, and also to ensure that the prohibitions and penalties regarding hunting, wildlife trade, and the collection of other forest resources are widely known.
- t) The Company shall adopt appropriate management and mitigation measures such as speed limits, emergency response systems for spills, and mandatory reporting of incidents involving wildlife.
- u) The Company shall monitor habitat and key wildlife species to assess whether any further mitigation or management measures are required.
- v) The Company shall ensure that the location of wind turbines, Transmission Route, and access roads avoid, to the maximum extent possible, areas of high ecological, cultural, economic, and aesthetic value and sensitivity.
- w) The Company shall carefully monitor land clearance activities to ensure that vegetation is not cleared beyond pre-defined Project boundaries, and include clear marking of the boundaries of the vegetation clearance prior to the clearance.
- x) The Company shall ensure that ground vegetation and shrubs below the clearance height specified in LEPTS are not disturbed in the right of way under the Transmission Route.
- y) The Company shall prune trees that can survive pruning to less than 3 meters height within the right of way under the Transmission Route, rather than removing them where possible.
- z) The Company shall ensure appropriate design of infrastructure to minimise erosion and potential disturbance to drainage lines.

- aa) The Company shall use appropriate native and non-invasive plant species for re-vegetation and Rehabilitation Works.
- bb) The Company shall prohibit the use of herbicides to control vegetation along the right of way under the Transmission Route.
- cc) The Company shall prohibit the use of burning to clear and control vegetation along the right of way under the Transmission Route and any other Project Site.
- dd) The Company shall restrict construction and vegetation cutting activities to daytime hours only to minimise the impact of nuisance noise at night.
- ee) The Company shall ensure that riparian vegetation is not cleared except where absolutely necessary.

In order to take account of the safety and interests of local communities, the Company shall plan and implement biomass removal, and the Company shall:

- (i) take into consideration sensitivities regarding cultural sites and community events;
- (ii) ensure that the burn off of biomass waste is done in a controlled manner by planning safety measures such as fire breaks;
- (iii) ensure that biomass removal is minimised to reduce potential environmental issues such as increased air quality impacts, erosion and water quality impacts, and the generation of greenhouse gas emissions;
- (iv) ensure that the management of biomass waste as a result of biomass removal is clarified, agreed upon, and implemented under the supervision of the ESMO;
- (v) ensure that necessary resources are provided to establish community forest organisations in Affected Communities, which have rights to collect resources such as firewood and "lesser valued" timber from the inundation area before clearance, and that these resources are fairly divided between local community groups on the basis of meetings between Affected Communities and representatives from the Project owner;
- (vi) ensure that labour inputs by local villagers in the development and implementation of a specific biomass removal plan are maximised;
- (vii) implement community safety measures along all access roads associated with biomass removal activities; and
- (viii) conduct environmental education and awareness programs for all Project staff prior to construction to improve understanding of biodiversity conservation, cultural sensitivities, and the importance of forest resources for Affected Communities, and also to ensure that the prohibitions and penalties regarding hunting, wildlife trade, and the collection of other forest resources are widely known.

# 2.3: Protection of Cultural, Archaeological, and Historical Heritage

# 28. Protection of Cultural and Archaeological Heritage

- a) In order to respect cultural or archaeological sites or to minimize or mitigate harm to such sites, the Company shall:
  - (i) prior to any disturbance, undertake detailed surveys of the Site that will be disturbed, including quarries, borrow pits, and disposal areas to identify, map, and mark sites or assets of cultural, religious, archaeological, historical, or natural significance;
  - (ii) avoid disturbance of identified sites or assets of cultural, religious, archaeological, historical, or natural significance;
  - (iii) conduct inductions in cooperation with the Ministry of Information, Culture, and Tourism regarding the legal requirements and specific measures for protection of archaeological and cultural heritage values for all staff and Contractors on Site;
  - (iv) instruct the Contractors and Subcontractors on the requirements of this Clause 25;
  - (v) prevent the sale of stone tools and any other artefacts to private collectors;



- (vi) in cases identified as having substantial cultural or archaeological heritage impacts, support the Department of Heritage, Ministry of Information, Culture, and Tourism to establish a local museum to display artefacts from the area; and
- (vii) set up a grievance procedure that will allow the investigation and resolution of complaints relating to archaeological and cultural heritage matters.
- b) If assets of cultural, religious, archaeological, historical, or natural significance are discovered during Project activities, the Company shall:
  - (i) immediately cease the relevant activities and notify the Ministry of Information, Culture, and Tourism;
  - (ii) mark and document the finding; and
  - (iii) resume the activities only after the Ministry of Information, Culture, and Tourism has surveyed the site, recovered or otherwise safeguarded the assets, and given their approval to continue Project activities.

#### 2.4: Erosion and Sediment Control

#### 29. Erosion Control Measures

To prevent or otherwise mitigate erosion at Project sites, the Company shall design, construct, and operate the Project in compliance with the requirements of this Clause26. as follows:

- a) areas within the construction site which are not required to be disturbed by Project activities shall be maintained in their existing condition or equivalent;
- b) minimize the area of disturbed surfaces, and sequence and schedule work to minimize the duration of time that large erodible surfaces are exposed;
- where practicable, reuse stormwater for various purposes to reduce the amount of water that would otherwise have to be treated and discharged, and to reduce consumption of water from other sources;
- d) design and construct non-erodible channels or bunds to separate runoff from undisturbed areas and stable rehabilitated area from sediment-laden runoff:
- e) design and construct non-erodible channels or bunds within or downslope disturbed areas to ensure that sediment-laden runoff from disturbed areas is collected (and not mixed with clean runoff), and conveyed to effective treatment systems ensuring compliance with the effluent limit values stipulated in the Applicable Laws and Appendix 2 prior to discharge into waterways;
- f) ensure that both temporary earthworks and permanent land-shaping (including spoil disposal areas, stockpiles, road batters, quarry batters, and other engineered slopes) provide a landform which minimises erosion hazards; and
- g) design and construct channels/drains (and their inlet and outlet work) to convey water and remain structurally intact at least up to the 0.01 (1%) 24-hour annual exceedance probability rain event. The design shall always consider the risk of damage to environmentally sensitive areas and/or the risk of substantial loss of property or a danger to life.

#### 30. Sediment Control Measures

To prevent or otherwise mitigate discharge of sediment-laden runoff or wastewater from Project sites and facilities into natural waterways, the Company shall design, construct, and operate the Project in compliance with the requirements of this Clause 27 as follows:

a) install sediment control measures to trap, contain, and treat sediment-laden runoff from disturbed areas, and effluents from construction works or installations such as wash bays, aggregate plants, batching plants, excavations, and grouting and drilling activities;

- b) discharges from installations or activities such as wash bays, aggregate plants, batching plants, excavation, and grouting and drilling activities that may be polluted by contaminants other than natural soil materials, shall be provided with separate drainage and treatment facilities, with uncontaminated runoff diverted around these sites;
- c) design, construct, and maintain sediment retention facilities to ensure that the basins and their outlets are stable in the peak flow of at least the 0.02 (2%) annual exceedance probability rain event, and, for sensitive environments, the 0.01 (1%) annual exceedance probability rain event. The design shall always consider the risk of damage to environmentally sensitive areas and/or the risk of substantial loss of property or a danger to life;
- d) design, construct, and locate sediment retention facilities to effectively deal with the particular composition of sediment particles and other pollutants from each site, and to ensure that the discharge from the structures will meet applicable effluent limit values;
- e) sediment retention facilities for runoff from soils with significant content of dispersible or fine-grained materials shall be designed to achieve applicable water quality standards for the 90<sup>th</sup> percentile five-day rain event, and, for sensitive environments, the 95<sup>th</sup> percentile five-day rain event;
- f) in case of runoff or discharges with significant content of dispersible materials, flocculation or other forms of treatment with chemicals shall be considered and applied where required to meet applicable water quality standards; and
- g) all trapped sediments shall be disposed at designated disposal sites creating stable landforms with low risk of erosion and generation of sediment-laden runoff.

# 31. Maintenance and monitoring

- a) The Company shall conduct routine inspections not less frequently than weekly of erosion and sediment control measures, and promptly undertake necessary maintenance, repair, and upgrading works to ensure that the design capacity is maintained. The Company shall always undertake inspections within 24 hours of a rainfall event with 25 mm rainfall or more in a 24-hour period.
- b) The inspections conducted by the Company shall include checking and documenting the capacity, structural integrity, accumulation of debris or sediments, effectiveness, and signs of scour or other forms of erosion.
- c) The Company shall clean out and restore to original conditions any erosion or sediment control feature that has reached half of its capacity.
- d) The Company shall remove sediments accumulated in runoff diversion channels and bunds.

#### 2.5: Waste Management

#### 32. Spoil Disposal Management

The Company shall ensure that the disposal of spoil and waste is planned and undertaken in a manner so as to prevent or minimize the generation of waste materials, damage to the environment, and to prevent and control erosion, generation of acid rock drainage, metal leaching, and the run-off of sediment-laden or otherwise contaminated water and, to that end, shall:

- a) ensure the maximum re-use of spoil in construction activities;
- b) ensure that spoil is disposed of in accordance with a spoil disposal management plan that shall, at a minimum: (a) identify and map disposal sites; (b) set out the conceptual design, construction methods, layout plans, and location map for disposal; (c) identify the types (geological), height, and volumes of materials to be disposed of; (d) set out erosion and sedimentation control measures; (e) identify haul routes and means of transport; (f) set out a maintenance and monitoring program; (g) include a schedule of construction, operation,



- rehabilitation, and closure (handover); and (h) identify and describe rehabilitation measures, final land use and land form, aftercare measures, and monitoring;
- c) locate disposal sites: (a) on lower slope land, so that stable landforms can be created; (b) on land with a slope of less than 10%; (c) on degraded or lower value land devoid of forest or with highly degraded forest cover, or land with poor soil quality and, in any case, on land that does not host threatened or endangered plant or wildlife species; (d) away from wetlands, riparian zones, or unstable slopes where the added weight could trigger mass movement; (e) away from land with a high ground water table, or where a thick organic layer is present; and, in any case, on land which is situated above the 0.05 (5%) annual exceedance probability flood line (20-year average recurrence interval, 1:20-year flood line);
- d) clearly mark disposal areas on maps at the Site and displayed throughout the Construction Period, ensuring that such marking includes an indication of the maximum volume of spoil to be stored within the area;
- e) ensure that spoil is disposed of only at designated spoil or waste rock disposal sites, and that it is not side tipped along roads or down slopes;
- f) ensure that all necessary disposal site preparation activities are completed prior to the commencement of the related spoil generation, handling, and disposal;
- g) install erosion and sediment controls such as non-erodible channels or bunds at each disposal site and ensure these are progressively adjusted as the landform changes, to minimise on-site erosion and prevent off-site sedimentation;
- h) ensure that only the following types of materials are disposed at the spoil disposal sites: (a) naturally occurring materials (such as clay, gravel, sand, soil, or rock fines) that do not contain sulfidic ores or soils, or any other waste; (b) surplus inert construction waste materials; and (c) sediments from sedimentation ponds and drainage channels;
- ensure that roots and stumps and other vegetation debris are separated from the spoil materials
  prior to disposal and either mulched on-site for reuse in landscaping or ground stabilization
  works, burnt on-site, or disposed of in accordance with the requirements for solid waste
  management;
- j) ensure that spoil is shaped into stable landforms, with permanent drains installed to maintain landform stability and prevent erosion and final landform slopes that do not exceed 1:2.0 (vertical: horizontal);
- k) conduct routine inspections, not less frequently than once a week, of erosion and sediment control measures, and promptly undertake necessary maintenance, repair, and upgrading works to ensure that the design capacity is maintained; and
- 1) undertake inspections within 24 hours of a rainfall event with 25 mm rainfall or more in a 24-hour period.

#### 33. Waste Disposal

During the Operating Period, the Company shall ensure that waste is handled and deposited in a manner as to prevent negative environmental impacts and, to that end, shall:

- a) actively promote and encourage reuse of waste from the Project;
- b) ensure that waste disposal sites are located so as not to pose any risk to any stream, river, or other water body in case of structural failure, overflow event, or seepage;
- c) ensure that wet disposal of waste is not permitted;
- d) ensure that waste shall be disposed (whether temporary or permanent) in landfills (designed, sited, constructed, and managed in accordance with the requirements of this Clause 30) to minimize contact with water during normal and abnormal weather events, and with environmental controls in place, including run-on/run-off controls, liners, leachate collection systems, groundwater monitoring, closure controls, daily (or other operational) cover, and fugitive dust controls; and

e) runoff and leachate shall be collected, contained, treated, and monitored to ensure compliance with the effluent limit values in Appendix 4.

#### 34. Solid Waste

During the Concession Period, the Company shall ensure that solid wastes are managed and disposed in such a manner as to prevent negative environmental impacts and, to that end, shall:

- a) plan waste management activities in accordance with the following waste hierarchy: (a) waste prevention, particularly with regard to hazardous waste; (b) waste reduction; (c) waste re-use;
   (d) waste recycling; (e) waste disposal, with waste that cannot be reused or recycled being controlled, handled, and disposed in an environmentally sound and safe manner;
- b) develop, implement, and periodically review a waste management plan as part of the ESMMP-CP/ESMMP-OP that shall: (a) characterize and categorize the types of waste that are likely to be generated throughout the Concession Period in terms of composition, environmental risks, and means of reuse or recycling; (b) apply to all Project sites, including work areas, disposal sites, workshops, stockyards, labour camps, and offices within the Site; (c) contain an estimate of waste quantities and rates of generation by type and source; (d) include a description of the Project waste management system including waste management flow charts, tables and descriptions on how waste will be handled, segregated, reused or recycled and disposed; (e) contain a description of waste management facilities, including the types of waste that each facility is designed to handle, location map, capacity, design, and layout plans; (f) set out waste management operational procedures, including with regard to: i) waste segregation, waste storage, and waste collection operations; ii) the management of external waste management and recycling companies; and iii) landfill operations; (g) set out a system for the collection, recording, and analysis of waste data; (h) identify waste management training programme requirements; (i) include provisions addressing the decommissioning and rehabilitation of waste disposal sites, including rehabilitation objectives, a description of methods, final land use and land form, aftercare measures, and monitoring requirements;
- c) construct specifically designed facilities to manage non-hazardous wastes on-site, including:
   (a) storage and separation area for recyclables;
   (b) sewage and greywater treatment plants;
   (c) residue waste landfill for non-recyclable and non-hazardous materials;
- d) segregate solid waste into four categories as follows: (a) hazardous waste; (b) biodegradable materials vegetation and food scraps; (c) recyclable materials processed timber, hard plastic, glass, metal, paper and cardboard, and tyres; and (d) non-hazardous residue waste;
- e) ensure that clearly labelled, colour-coded bins are placed at designated locations (i.e., at points of waste generation) for temporary storage of segregated materials;
- f) ensure that solid waste that is generated during the Concession Period is segregated for reuse and recycling where in preference to on-site disposal and that all remaining waste (that cannot be reused or recycled) will need to be disposed of appropriately in designated waste management facilities, to prevent contamination of surface runoff and groundwater;
- g) ensure that waste management facilities are located away from natural drainage lines, above the groundwater table, and within low permeability soils in accordance with the following criteria: (a) minimum 50 m from any river, stream, or other permanent surface water body; (b) minimum 500 m from any drinking water supply well; (c) minimum 500 m from any village, market, temple, or other place of cultural or social importance; (d) the depth from the bottom of the waste pit to the groundwater table (when it is at its highest level) shall be minimum 3 meters; (e) above the 0.01 (1%) annual exceedance probability flood line (100-year average recurrence interval flood line);
- h) ensure that any waste disposal sites located within the Site in compliance with the ESMMP-CP and ECC are designed and constructed in accordance with the following design criteria: (a) waste shall be isolated from the environment by a liner with a hydraulic conductivity of less than 1x10<sup>-9</sup> m/s covering the pit bottom and all sides; (b) waste pits shall have a leachate collection system (min 0.5 meters thick) overlain by a geotextile and a protective soil layer, and connected to a leachate treatment system able to ensure that the treated leachate complies



with the applicable effluent standards; (c) clean runoff shall be diverted away from the pits, leachate ponds, and active areas; (d) each solid waste disposal site shall be fenced, have a lockable gate, office building, and guard hut; (e) waste pits shall be equipped with landfill gas venting systems; (f) groundwater monitoring wells shall be installed upstream and downstream of waste disposal sites; and

i) ensure that solid waste disposal sites are managed and operated in accordance with the following requirements: (a) the operation of the landfill shall be carried out by qualified staff; (b) scavenging by humans or animals shall be prevented; (c) waste shall be compacted and covered daily or weekly as appropriate with suitable inert materials to minimise generation of foul odours, dust, windblown waste, and vectors (thickness approx. 0.15 meters); (d) waste shall be built into cells which, when full, shall be covered by an intermediate cover (thickness approx. 0.3 meters) of suitable inert materials; (e) incoming waste shall be measured and the data recorded and entered into a waste database; (f) when a waste pit has reached its full capacity, the pit shall be covered by a final cover typically consisting of 0.5 meters compacted clay liner and a vegetation layer.

#### 35. Hazardous Waste

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During the Concession Period, the Company shall ensure that hazardous waste is managed and disposed in such a manner as to prevent negative environmental impacts and, to that end, the Company shall - in addition to the requirements stipulated in Clause 31 above:

- a) ensure that hazardous waste is handled (collected, stored, treated, neutralized/destructed, and disposed) in accordance with applicable safety data sheet for the particular substance or material – where such exists – and in compliance with applicable internationally accepted guidelines, national and local regulations, and instructions from the competent authorities;
- b) construct appropriately designed and clearly marked storage facilities for hazardous waste;
- c) maintain an inventory of hazardous materials stored at the Site, including their quantities and locations;
- d) develop and periodically review an environmental emergency response plan;
- e) where feasible, taking into consideration transportation requirements, the Company shall consider using commercial or government-owned hazardous waste operators as the preferred option for transport, reuse/recycling, treatment, and disposal of hazardous waste, provided it is satisfied that such an operator has the necessary technical capacity, and all required authorizations and permits of the competent authorities;
- f) ensure that hazardous waste is temporarily stored in closed containers in specially designed facilities protected against direct sunlight, heat, wind, and rain, and that such containers are clearly labelled (where relevant in accordance with the Globally Harmonized System (GHS) for Classification and Labelling of Chemicals);
- g) ensure that: (a) incompatible hazardous wastes are stored in separate facilities or in separate compartments that protect against comingling of the waste; (b) hazardous waste containers are not stored in such a way that they come in contact with accumulated spills (e.g., the containers can be put on grates or pallets); (c) sufficient and appropriate fire extinguishing equipment and spill sorbent materials are at all times maintained in full working condition in the near proximity of hazardous waste storage facilities; (d) the offsite transport of hazardous waste is carried out by operators with all required authorizations and permits from the competent authorities; (e) all waste containers designated for offsite transport are secured and labelled with hazard classification and hazard labels, properly loaded on the transport vehicles before leaving the Site, and are accompanied by a shipping paper that describes the load and its associated hazards; and
- h) ensure that hazardous waste storage facilities are: (a) located in safe distance from drainage systems, streams, and rivers, above the 0.01 (1%) annual exceedance probability flood line (100-year average recurrence interval flood line), and with an appropriate safety zone free of any other structures and activities and,in cases where such location requirements cannot be

met due to site conditions and space limitations, the facilities shall be constructed with additional safety and control measures to effectively contain and prevent any spill from entering the surrounding environment; and (b) constructed with secondary containment wherever liquid wastes are stored in volumes greater than 220 litres. The available volume of secondary containment shall be at least 110 per cent of the largest storage container, or 25 per cent of the total storage capacity (whichever is greater), in that specific location. The floor, berms, and any other part of the secondary containments shall be impervious, free of cracks and gaps, and made of materials that are resistant to the waste stored in the facility; and (c) under cover, sheltered, and properly ventilated.

#### 36. Waste Monitoring

- a) In order to ensure the effective management of wastes generated at the Site, the Company shall:
  - (i) conduct routine inspections, not less frequently than weekly, of all waste storage, treatment, and disposal facilities, promptly undertake necessary maintenance and repair works, and clean-up any spills and litter;
  - (ii) maintain a data base that shall be updated each month on the types of wastes generated, the quantity of such wastes, the re-use or disposal of such wastes, the quantities of such wastes transferred to or disposed of at a place within the Site, and details of any external waste operator to whom the waste is consigned if relevant;
  - (iii) ensure that groundwater upstream and downstream of solid waste disposal sites is monitored in accordance with the requirements stated in the basic requirements for Measures in relation to water quality management and monitoring;
  - (iv) ensure the monitoring of leachate systems and leachate discharged to the environment in accordance with the requirements stated in the basic requirements for water quality management and monitoring measures; and
  - (v) ensure that hazardous wastes are managed and disposed of in such manner to prevent negative environmental impacts.
- b) The Company's obligations set out in this Clause 33 shall be implemented as further described and, as necessary, varied from time to time in the ESMMP-CP/ESMMP-OP.

#### 37. Hazardous Materials

In order to prevent or minimize the use of hazardous materials and to ensure the safe and secure management of hazardous materials at the Site, the Company shall ensure that:

- a) no asbestos containing materials will be used in Project construction materials or in any equipment or installation of the Project;
- b) areas for refuelling, and cleaning or maintenance of equipment are bunded or otherwise properly protected so as to prevent the risk of pollution from spills, leakage, or run-off;
- c) containers of liquid hazardous materials such as fuels, oils, and lubricants are stored in leakproof containers within bunded areas;
- hazardous materials storage facilities are appropriately designed and constructed, and clearly marked;
- e) an inventory of hazardous materials stored at the Site, including their quantities and locations, is maintained and updated monthly;
- hazardous materials are stored in closed containers protected against direct sunlight, heat, wind, and rain, and that such containers are clearly labelled (where relevant in accordance with the Globally Harmonized System (GHS) for Classification and Labelling of Chemicals);
- g) incompatible hazardous materials are stored in separate facilities or in separate compartments that protect against comingling of the waste;

- h) hazardous materials containers are not stored in such a way that they can come into contact with accumulated spills (e.g., the containers can be put on grates or pallets);
- i) sufficient and appropriate fire extinguishing equipment and spill absorbent materials are at all times maintained in full working condition in the near proximity of hazardous materials storage facilities;
- j) offsite transport of hazardous materials is carried out by operators with all required authorizations and permits from the competent authorities;
- k) hazardous materials storage facilities are located in safe distance from drainage systems, streams, and rivers, above the 0.01 (1%) annual exceedance probability flood line (100-year average recurrence interval flood line), and with an appropriate safety zone free of any other structures and activities. In any cases where such location requirements cannot be met due to site conditions and space limitations, the facilities shall be constructed with additional safety and control measures to effectively contain and prevent any spill or leak from entering the surrounding environment;
- hazardous materials storage facilities are constructed with secondary containment wherever liquid wastes are stored in volumes greater than 220 litres. The available volume of secondary containment shall be at least 110 percent of the largest storage container, or 25 percent of the total storage capacity (whichever is greater), in that specific location. The floor, berms, and any other part of the secondary containments shall be impervious, free of cracks and gaps, and made of materials that are resistant to the materials stored in the facility;
- m) efficient oil and grease traps are installed and maintained at refuelling facilities, workshops, fuel storage depots, and containment areas, and that spill kits are available for clean-up of spills;
- n) an emergency response plan is developed and periodically reviewed;
- o) vehicle and equipment maintenance is conducted in designated areas where contaminated runoff can be contained;
- p) vehicles and equipment are parked on sealed surfaces in designated parking areas where contaminated runoff can be contained;
- q) procedures for management of oil or hydrocarbon spills are documented in the emergency response plan;
- r) heavy equipment used in or adjacent to the river is completely clean of hydrocarbon residue;
- s) water levels remain below the gearboxes and axles of any vehicles or mechanical equipment in use; and
- t) all lubricants and fuel tanks are sealed such that inundation by water will not result in leaks.

#### 2.6: Water Quality Management

#### 38. Water Pollution Prevention

- a) The effluent limit values for the most common substances applicable to the Project are listed in Appendix 4. For substances not listed in Appendix 4, the Applicable Laws shall apply.
- b) During the Concession Period, the Company shall undertake all necessary measures to minimize water pollution from activities relating to the Project and, to that end, shall:
  - establish and maintain an inventory of all effluent discharge points and ensure that the combined discharges do not cause the ambient surface water quality standards (in the Lao National Environmental Standards as referred to Appendix 2) to be exceeded in the recipient;
  - (ii) ensure that any water that is discharged off-site complies with the relevant effluent limit values, and, to that end, design and establish appropriate water treatment facilities for processing water from sanitary wastewater, leachate from landfills and disposal sites,



- runoff from disposal sites, and fuel storage, and wastewater from workshops, and other wastewater from the Project and installations to meet the relevant effluent limit values prior to discharging so as to not contaminate groundwater and surface water;
- (iii) install sedimentation ponds at all sites potentially generating sediment-laden runoff or effluents with cementitious wastewater. Sediment ponds shall be designed and established with sufficient capacity to inlet and open channels;
- (iv) installa system of bunds and drains that allow water from all "clean (undisturbed)" areas to be diverted away from disturbed areas, and water from 'dirty' areas to flow to treatment or containment facilities;
- (v) establish appropriately located storages of sufficient capacity for containment of 'dirty water' for treatment or use in mining operations;
- (vi) prevent the washing of vehicles or equipment adjacent to or in streams and ensure the use of designated wash down areas; and
- (vii) undertake regular monitoring of ambient water quality in rivers and streams potentially affected by Project activities upstream and downstream the point of Project impact to confirm that these measures are working effectively.
- c) The Company's obligations set out in this Clause 35 shall be implemented as further described and, as necessary, varied from time to time in the ESMMP-CP / ESMMP-OP.

#### 39. Groundwater Quality

The Company shall throughout the Concession Period regularly monitor groundwater quality upstream and downstream of the Project Facilities, and hydrogeological parameters (groundwater table, groundwater piezometric surface), and implement effective measures to mitigate risks and impacts due to changes in groundwater quality or flow regime.

#### 40. Shadow Flicker

It should be understood that shadow flicker is considered an environmental "nuisance" rather than a medical risk, as there is insufficient evidence to indicate that shadow flicker causes health problems. Thus, these mitigation measures are identified to address issues regarding cause and effect of shadow flicker from wind turbines.

- a) Siting –ensure that wind turbines have been sited according to the World Bank/IFC Guidelines to ensure that shadow flicker is below 30 hours per year at all potential sensitive receptors, where possible.
- b) Grievance Monitoring and Reporting —ensure close monitoring through engagement with residents during the Operating Period, where there are predicted impacts from shadow flickers for locations that have been finalized by the Project proponent and earmarked for construction.
- c) Visual Screening (Natural) continuously assess all identified as well as any potentially sensitive receptors, where shadow flicker modelling indicates that the amount could exceed 30 hours per year and 30 minutes per day, to ascertain the extent of existing natural visual screening in place. If not existing, the occurrence of shadow flickering during operation could be further investigated, and if confirmed, natural screening could be implemented to minimize the effect.
- d) Visual Screening (Architectural/Structural) —if grievances are received or if natural visual screening at potentially sensitive receptors is found to be insufficient, investigate implementing architectural/structural screening, such as the installation of blinds, window shades, window tinting, awnings, or fences at affected receptors to evaluate whether architectural/structural screening could further minimize the effect of shadow flicker.
- e) Compensation –if shadow flicker mitigation through natural or architectural/structural visual screening methods is found to be insufficient, the Project will provide compensation to affected receptors based on an assessment of the economic impacts of shadow flicker, and taking into

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consideration the residual impact of shadow flicker following mitigation through the alternative means outlined above in a) to d).

#### 41. Transportation

In order to prevent or minimize road accident risks associated with transportation during the Construction Period and to ensure the safety of existing infrastructure, facilities, and communities during the transportation of equipment and materialsto and at the Site, the Company shall ensure that it will:

- a) contact and coordinate with the Ministry of Public Works and Transport, the Provincial Department of Public Works and Transport, the District Office of Public Works and Transport, and otherRelevant Authorities to facilitate the transportation of equipment and machinery to the Site of the Project;
- b) avoid transporting the equipment and machinery for the installation of wind turbines during rush hours (7:00 8:00 and 17:00 18:00);
- c) provide training to drivers for the transportation of construction materials or construction workers to ensure that they strictly follow the traffic rules;
- d) limit the speed of vehicles operating within the construction area not to exceed 30 to 40 km/hour;
- e) control truck loads to ensure compliance with Applicable Lawsor Standards in order to prevent damage to the existingroads and infrastructure;
- f) organize the traffic system in the construction area and provide staff to supervise vehicles arriving to and leaving the construction area;
- g) arrange an advance announcement to the public and notification to Relevant Authorities for information in case it is required to close road(s) for the transportation of large equipment, so that the villagers are able to use alternative routes. This is to prevent the potential occurrence of an accident;
- h) undertake maintenance and inspect the working condition of machinery, vehicles, and equipment every time before use in order to ensure safety in transportation;
- i) ensure that all drivers must have driving licenses in accordance with their assigned vehicles;
- j) conduct a survey of the existing roads and infrastructure to be used for the transportation of equipment and materials prior to such transportation, including designs for improving roads or infrastructure by the transport engineering team, to ensure safety in transportation:
- k) set up a coordinating team to deal with accident cases that occur during the transportation of equipment and materials to ensure that such accidents will be addressed in a timely manner;
- l) install traffic signs along the transportation route, especially at the cross-roads, curving roads, side roads, and village areas;
- m) ensure that vehicle operators comply with the Law on Road Transportation (No. 036/NA, dated 12 December 2012);
- n) ensure that the Project roads and the roads in village areas which are used by the Project as
  access roads must be constructed in accordance with the applicable Standards and can be used
  conveniently during both seasons;

- o) allocate budgets for maintenance work, with contributions from the relevant sectors and people who jointly use the roads of the Project;
- p) install traffic signs along the Project roads, especially at curving roads, sloped roads, and road junctions to ensure safety for the transportation and traffic of people and the Project;
- q) establishinternal road safety rules to ensure that drivers take precaution and strictly comply with the traffic rules;
- r) limit the speed of vehicles operating in the community area not to exceed 30to 60 km/hour or not to exceed the speed limit set out in the Applicable Laws;
- s) inspect, improve, and repair the roads within the Project area to keep them usable in all seasons in a safemanner, and to make contribution to the local road maintenance fund; and
- t) install light signals on the top of the wind turbine towers in compliance with the Applicable Laws relating to the safety of construction structures in the path of air flights.

#### 2.7: Reforestation

#### 42. Reforestation area

- a) The Company shall undertake reforestation at the following sites as further specified in the detailed action plan.
- b) The Company shall contribute the budget for the Department of Forestry, Ministry of Agriculture and Forestry, as listed in Appendix 6, Item [VI] to monitor the carrying out of reforestation activities by the Company.

#### 2.8: Rehabilitation Measures

#### 43. Rehabilitation Measures

- a) The Site shall be recontoured, with depressions filled and revegetated to create a final surface that is consistent with the original topography of the area.
- b) The final landforms and slopes shall be designed to protect groundwater quality, prevent surface water ponding, facilitate revegetation, convey runoff in a non-erosive manner, and to account for long term settlement.
- c) All Sites shall be revegetated in such a way as to establish a diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration without continued dependence on irrigation, soil amendments, or fertilizer, and is at least equal in extent of cover to the natural vegetation of the surrounding area.

The Company shall complete the Rehabilitation Works and Decommissioning Activities of the Project in accordance with Annex H2 of the Concession Agreement.



#### PART III: COMPENSATION

#### 3.1: Rules on Compensation

#### 44. Compensation values

Compensation values shall be determined based on replacement costs calculated in consultation with the Compensation Committee, the district and village authorities, the CMU, and the PAPs – and shall be approved by the Compensation Committee.

#### 45. Compensation in the form of land

- a) Every land plot provided by way of compensation shall be of equivalent or greater size, value, or productive potential to the land plot(s) lost to the PAP as a result of the Project.
- b) In the event that compensation in land is provided in respect of more than one land plot, the Company may, with the written agreement of the concerned PAP, cumulate the total land size of the lost land plots to create one single land plot of equivalent or greater area.
- c) The Company shall propose one or more land plots to each concerned PAP for their approval, and shall provide the necessary facilities so that each such PAP, accompanied by a member of the Compensation Committee, can inspect such land plot.
- d) The consent of a PAP to accept a land plot provided by way of compensation shall be freely made in writing by that PAP and witnessed by: (a) a member of the Compensation Committee; and (b) an adult member of the PAP's family, preferably their spouse or the head of household.
- e) In the event that an agricultural land plot provided by way of compensation is distant from the dwelling of the PAP, the Company shall provide financial or material compensation so as to facilitate access to the land plot by the concerned PAP.

#### 46. Compensation in the form of materials

- a) Materials provided by way of compensation shall be of equivalent or of greater quantity and quality to those being compensated.
- b) The Company shall propose the materials to be provided by way of compensation to each concerned PAP for their approval, and shall provide the necessary facilities so that each such PAP, accompanied by a member of the Compensation Committee, can inspect such materials.
- c) The consent of a PAP to accept materials provided by way of compensation shall be freely made in writing by that PAP and witnessed by: (a) a member of the Compensation Committee; and (b) an adult member of the PAP's family, preferably their spouse or the head of household.

#### 47. Compensation delivery schedule

- a) Compensation shall be implemented according to the following procedures:
  - upon the declaration and dissemination of the Cut-off Date, the Company shall immediately obtain permission from the village and district authorities and from the husband and wife of each individual PAH to undertake the detailed measurement survey;
  - (ii) the Company shall, in collaboration with the CMU and the village and district authorities, undertake the detailed measurement survey, comprising of a complete measurement and registration of the expected loss of assets or loss of access to assets for each PAH. The Company shall, for each PAH, record the expected losses in a loss of assets register (the "Loss of Assets Register");
  - (iii) each PAH shall receive a copy of the Loss of Assets Register for their review and acceptance, and if accepted, to be signed by the husband and wife (if the PAP does not



- accept the Loss of Assets Register, further consultations shall be held, and if still unresolved, the PAP may file a grievance). The Loss of Assets Register accepted by the PAH shall be countersigned by the Company, the Relevant Authorities at village and district levels and the CMU;
- (iv) based on the Loss of Assets Register, the Company shall calculate the compensation (in-kind and in cash as applicable) applying the compensation policy, EntitlementsMatrix, and compensation unit rates endorsed by the Compensation Committee, and the Company shall, for each PAH, prepare a Compensation Agreement constituting the full compensation package for review and acceptance by each individual PAH;
- (v) each PAH shall receive a copy of the Compensation Agreement for their review and acceptance, and if accepted, to be signed by the husband and wife (if the PAP does not accept the compensation offer, further consultations shall be held, and if still unresolved, the PAP may file a grievance). The Compensation Agreement accepted by the PAH shall be countersigned by the Company, the Relevant Authorities at village and district levels, and the CMU; and
- (vi) in accordance with the provisions of the compensation delivery schedule contained in the Compensation Plan, and in any event within twelve (12) months of the Effective Date.
- b) Financial compensation shall be paid in accordance with Compensation Agreements directly by the Company into a joint bank account in the name of the head of household and spouse of the PAP or, if that is not reasonably practical due to the remoteness of the location, directly to the PAP concerned and as witnessed by the CMU or its authorised representatives.
- c) Compensation in the form of land shall be provided by handing over to the PAP documents evidencing registered title to the compensation land in the presence of and as witnessed by the CMU or its authorised representatives.
- d) Compensation in the form of materials shall be provided by transferring to the PAP documents relating to the materials together with the materials themselves in the presence of and as witnessed by the CMU or its authorised representatives.
- e) The Company and the CMU shall both maintain full records of all compensation provided under the Compensation Plan, the signed Loss of Assets Register, and the Compensation Agreements for as long as the Compensation Committee is in place.
- f) The Company may not carry out or allow any of its Contractor or Subcontractor to carry out any activities which would adversely affect any PAP until the concerned PAPs have accepted their respective compensation package and received the agreed compensation.

#### 3.2: Rules on Livelihood Restoration

#### 48. Livelihood Restoration and Improvement Plan

a) With the aim of achieving the Livelihood Restoration and Improvement Targets as defined in Clause 44, the Company shall, no later than three (3) months prior to the start of the Construction Period, prepare and submit to the MONRE a Livelihood Restoration Plan in both Lao and English language in full compliance in all respects with Applicable Laws, Standards, and this Annex C, and shall incorporate the entitlements under the Entitlements Matrix set out in Appendix 5.

- 49. The Company shall submit the Livelihood Restoration Plan to the provincial compensation management committee for review and approval. Therelevant budgets required for the Livelihood Restoration Plan are listed in Appendix 6 (Item II). Livelihood Restoration Targets
- a) Livelihood restoration measures shall be implemented to achieve the income restoration target specified in each of the tests set out in this Clause 44 (the "Livelihood Restoration and Improvement Targets").
- b) Poverty Elimination Test. The Company shall ensure that, by the date which is five (5) years after the Effective Date, no PAP household shall be at a level below the applicable National Rural Poverty Line then in effect, provided, always, that:
  - (i) the GOL may revise the National Rural Poverty Line from time to time; and
  - (ii) the Company shall ensure that this poverty elimination test is applied and sustainably met with respect to each PAP household at successive two (2) year intervals thereafter until the date which is ten (10) years after the Effective Date.
- c) for the avoidance of doubt, the direct compensation for economic losses incurred due to the Company's activities, the Project, and any activities related thereto shall not be deemed to satisfy any of the Company's obligations specified under this Clause 44; and
- d) the Company shall provide transitional assistance to all significantly Affected People, including self-significantly Affected People, throughout the transitional period in accordance with Appendix 5 to this Annex and in accordance with Applicable Laws.

#### 50. Specific Rules on Monitoring and Reporting

- a) The self-monitoring program of the Company shall include, at a minimum, the following indicators:
  - (i) implementation progress;
  - (ii) compensation progress;
  - (iii) replacement land development and status;
  - (iv) livelihood development and restoration;
  - (v) achievement of Livelihood Restoration and ImprovementTargets;
  - (vi) health of PAPs;
  - (vii) budget and expenditures;
  - (viii) quality of the compensation process, including issues relating to consultations, gender, ethnic minorities, vulnerable groups, grievances, transparency, and disclosure; and
  - (ix) outcomes of the implementation of the Compensation Plan and Livelihood Restoration Plan.
- b) The Company, through the CMU, shall rectify any failure by the Company to perform, in whole or in part, its obligations with regard to the implementation of the Compensation Plan and Livelihood Restoration Plan.

#### 51. Reporting obligations

a) During the period from the Effective Date until three (3) years thereafter, the Company shall prepare and submit quarterly reports covering the progress, achievements, and difficulties with implementing the Livelihood Restoration and Improvement Target programmes of the Project. The reports shall also record and describe the number and type of social-related instances, the impacts of such incidents, the proposed remedial measures, and any monitoring of data of social indicators for such period. Thereafter, such progress reports shall be made quarterly until such time as the Compensation Committee is dissolved.

- b) The Company shall also prepare and submit annual reports covering: (a) a summary of the items covered by the required quarterly progress reports in Sub-Clause a) above;(b) a gantt diagram showing the implementation of measures carried out pursuant to the Compensation Plan and Livelihood Restoration Plan during the period against what was planned; (c) progress of planned outputs and performance objectives, (d) significant problems encountered and remedial measures taken; and (e) identification of any deviation from the Compensation Plans and Livelihood Restoration Plans or the other obligations in this Annex C.
- c) The Company shall immediately notify the Compensation Committee and the Implementing Agency as to any serious complaint, problem, or non-compliance, or where the urgent attention of the Compensation Committee or the Implementing Agency is required. The Company shall submit all reports specified under this Clause 46 to the Compensation Committee.

# 1. Definitions

In this Annex, the terms below shall have the meanings specified herein. All other terms shall be as defined in the Concession Agreement.

"Adverse Impact" means any adverse environmental, social, socio-economic, health, occupational safety and health, labour, or security effect, to the extent such adverse environmental, social, socio-economic, health, occupational safety and health, labour, security or effect is not directly and solely attributable to any act or omission of the GOL Authority, suffered or borne by any (a) entity or natural person physically present in the Lao PDR, or (b) entity or natural person engaged in any activity in the Lao PDR, or (c) entity or natural person registered (in the case of a juridical person) under the laws of the Lao PDR, including without limitation citizens and residents, or (d) natural resource including without limitation the environment, flora and fauna, and in any such case, to the extent attributable in any degree to, or to the extent arising in any manner from, any action or omission of the Company (including Contractors, Subcontractors and all other entities involved in the Project), or from the Project or any activities related thereto.

"Affected Communities" means people and groups of people living, working, and securing their livelihoods in the land area within and adjacent to the Site and Project activities who can be reasonably expected to be affected by the Project and such activities.

"Applicable Laws" means all laws, regulations, treaties, and other international obligations of the Lao PDR applicable to the Company's activities or to the Project that have been promulgated on or before the Effective Date, including without limitation, those Laws listed in paragraph 1.1 of Appendix 2 (Standards).

"Biodiversity Offset" means a combination of actions, such as restoration of habitats, offset of losses through the creation or effective conservation of ecologically comparable areas that are managed for biodiversity while respecting the on-going use of such biodiversity by ethnic groups or traditional communities, and compensation to direct users of biodiversity as provided for in Annex C and this Agreement.

"Biodiversity Offset Plan" means a plan prepared by the Company to set the objectives, measures, and timelines to implement its obligations with respect to Biodiversity Offset.

"Capacity Building" means those activities (undertaken by the MONRE and local GOL Authorities utilizing Company-provided funding) which effectively enhance and strengthen the MONRE's and the local GOL Authorities' knowledge and understanding of, and technology aspects concerning, the comprehensive and effective monitoring of the Company's obligations related to the Project and any and all aspects thereof.

"Compensation Plan" means the plan for the payment of compensation to PAPs in connection with the Project, which comprises an element of the ESMMP.

"Compensation Committee" means the Provincial Compensation and Management Committee for the Project.

"Compensation Management Unit" or "CMU" means the executive body of the Compensation Committee referred to in this Annex.

"Concession Agreement" means the concession agreement made between the GOL and the Company for the development, ownership, and operation of the Project to which this Annex C is attached, as may be amended and/or supplemented from time to time.

"Contractors' EMMP" means each of the Contractors' Environmental Management and Monitoring Plans to be applied by each such Contractor (and its Subcontractors) as the

standard for the implementation of the Measures during the Construction Period and/or the Operating Period (as the case may be) in compliance and consistent with the ESMMP-CP and/or the ESMMP-OP (as the case may be) (excluding compliance with the monitoring plan, the compliance with which will be the responsibility of the Company).

"COVID-19" means the disease caused by the SARS-CoV-2 virus.

"CPI" means the Lao Consumer Price Index as published or determined by the Ministry of Planning and Investment.

"Cut-off Date" is the deadline for entitlement eligibility. Any person who, due to the Project, incurs a loss of assets or access to assets which that person had legitimate rights to on the cut-off date, is eligible to compensation for the loss of such assets or access to such assets as detailed in the Entitlement Matrix. The Cut-off date is the date after which any new structures, crops, trees, or other immovable assets will no longer be counted or measured for compensation purposes. The intent of the Cut-off Date is to prevent opportunistic settlements and construction of new structures by existing households. To be valid, the Cut-off Date's meaning and implications must be made public and clearly informed to the population in the Affected Communities. The dissemination of the Cut-off Date shall be made prior to that date and must be documented.

"Environmental Compliance Certificate" or "ECC" means the certificate identified as such and delivered by the MONRE approving the ESIA and EMMP.

"Effective Date" shall have the meaning as set forth in the Concession Agreement.

"Entitlement Matrix" refers to the entitlement matrix as specified in Appendix 5 of this Annex.

"Environmental and Social Impact Assessment" or "ESIA" means the Environment and Social Impact Assessment Report prepared by the Company and which was approved by the MONRE by means of the issuance of the Environmental Compliance Certificate, and any further supplements, modifications, amendments, or updates as approved by the GOL and the Lenders.

"Environmental and Social Management and Monitoring Plan" or "ESMMP" refers to the Company's Environmental and Social Management and Monitoring Plan approved by the MONRE by issuance of the ECC, and which defines the Measures, responsibility for the Measures, and schedule for implementation of the Measures, the management and monitoring plan and the assessment of the Project's impact on the environment that must be conducted, including sufficient budget planning for the environmental activities required during the Construction Period, Operating Period, and at Project completion or termination.

"Environmental and Social Management and Monitoring Plan for the Construction Period" or "ESMMP-CP" means the plan which the Company is obliged to prepare and submit to the MONRE for approval, and which specifies environmental and social measures and monitoring in accordance with the provisions in Appendix 2 of this Annex and integrates all Contractors' EMMPs to cover the Construction Period.

"Environmental and Social Management and Monitoring Plan for the Operational Period" or "ESMMP-OP" means the plan which the Company is obliged to prepare and submit to the MONRE for approval, and which specifies environmental and social measures and monitoring in accordance with the provisions in Appendix 2 of this Annex to cover the Operating Period.

"Environmental and Social Management Office" or "ESMO" means the unit established within the Company in accordance with Annex C to act as the focal point for environmental and social matters.

"Environmental and Social Management System" or "ESMS" means the set of plans to be prepared and implemented by the Company to implement its obligations with respect to environmental and social matters under the Concession Agreement.

"Impact Area" means the area at and surrounding the Project and any place or places in which the Company (including any Contractor and Subcontractor) carries on any activities which is affected by the Project or by such activities and encompasses within the Site.

"Implementing Agency" means the Ministry of Energy and Mines (MEM);

"Limited by Cost", for the budget classification of Measures, as the case may be, means that the financial liability of the Company, when performing such Measures or when funding the GOL in respect of such Measures, shall be limited to the indicated budget amount.

"Limited by Scope", for the budget classification of Measures, as the case may be, means that such Measures for which the estimate or budget cannot be calculated in the specific or exact amount of money but shall be limited or fixed by scope of the Measures. The cost required to be borne by the Company in order to achieve such compliance with the Measures in full shall be adjusted as may be necessary to ensure that the obligations are fully satisfied even if the original budget estimate or monetary amount proves to have been inaccurate or insufficient.

"Livelihood Restoration Plan" means the plan for the restoration of the livelihoods of PAPs in connection with the Project, which comprises an element of the ESMMP.

"Livelihood Restoration Target" means the target for household income restoration of Project Affected Persons as defined under Clause 44.

"Loss of Assets Register" means a complete list for each Project Affected Household of all assets or access to assets (i.e., land used for residence, commerce, agriculture, and industry; dwelling units; stalls and shops; secondary structures, such as fences, tombs, and wells; crops, trees, and natural resources that are the sources of income or livelihood) that will be lost due to the Project, partly or completely, temporarily or permanently.

"Measures" means the environmental and social measures to mitigate or offset Adverse Impacts on the environmental and social aspects which will be developed and implemented by the Company to ensure compliance with all its obligations set forth in the Concession Agreement and this Annex C.

"Monitoring Agency(ies)" refers to the third-party expert or experts engaged by the GOL to monitor the adequacy and effectiveness of the Measures, Compensation Plan, and Livelihood Restoration Plan, and to perform other services in the manner and timeline as requested by the GOL.

"MONRE" means the Ministry of Natural Resources and Environment of the Lao PDR, including any successor thereto.

"National Rural Poverty Line" means the Lao PDR indicator per person as calculated by the Lao Statistics Bureau (or National Statistics Center), which is current and in effect on the date on which such indicator is applied.

"Occupational Health and Safety Office" or "OHSO" means the unit established within the Company in accordance with this Annex to act as the focal point for health and safety issues.

"Operating Period" means the period from the Commercial Operation Date of the first WTG until the end of the Concession Period.

"Project Affected Household" or "PAH" means a household made up of one or more Project Affected Persons.

"Project Affected Person" or "PAP" means any person who, as a result of the Project, loses an existing recognized right to own, use, or otherwise benefit from a built structure, land (residential, industrial, agricultural, or pasture), annual or perennial crops and trees, natural resources, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.

"Rehabilitation Works" means the work and processes to be undertaken by the responsible party in order to bring a disturbed area into a functional and productive ecosystem that is well integrated within the wider surrounding area, and which is stable, free of pollution and not prone to landslide or excessive erosion – all in accordance with area-specific and time-bound rehabilitation objectives defined in the relevant ESMMP-CP or ESMMP-OP.

"SPCOD" means the Scheduled Project Commercial Operation Date as defined in Clause 25.1 of the Concession Agreement.

"Standards" means the standards as listed in Appendix 2 in existence on the Effective Date and applicable to the Company's activities, the Project, and each aspect or component of the Project, in strict and full compliance with which the Company is obliged under this Annex to carry out the Project, including without limitation, standards applicable to the design, contracting, site clearance, construction, implementation, operation, maintenance, rehabilitation, and all other activities of the Company in regard to the Project; standards governing the Project's impacts on the environment and on the social-economic circumstances of individuals, families, and communities in the Impact Area; and standards establishing ambient environmental quality, maximum permissible emissions levels, and remedial actions required to be implemented to avoid and reduce Adverse Impacts attributable to or arising from the activities of the Company and the Project. Standards are derived from and determined by reference to: (i) Applicable Laws, (ii) ADB Safeguards Policy, (iii) World Bank Guidelines, (iv) Equator Principles, and (v) Prudent Utility Practices, as may be modified by Authorizations and subject to Exemptions from the Standards.

#### 1. Applicable Laws:

Applicable Laws include, but are not limited to the following:

- The Constitution of the Lao PDR No. 63/NA, dated 8 December 2015
- The Law on Investment Promotion (Amended), No. 14/NA, dated 17 November 2016
- The Law on Electricity (Amended), No. 19/NA, dated 9 May 2017
- The Law on Environmental Protection, No. 29/NA, dated 18 December 2012
- The Law on Water and Water Resources, No. 23/NA dated 11 June 2017
- The Law on Forestry, No. 64/NA, dated 13 June 2019
- The Law on Aquatic and Wildlife Animals, No. 07/NA, dated 24 December 2007
- The Law on Land, No. 70/NA, dated 21 June 2019
- The Law on Fishery, No.03/NA, dated 9 July 2009
- The Law on Resettlement and Occupation, No. 45/NA, dated 15 June 2018
- The Decree on the Implementation of the Land Law, No. 88/PM, dated 3 June 2008
- The Decree on State Land Lease or Concession, No. 135/PM, dated 25 May 2009
- The Decree on Environmental Impact Assessment, No. 21/PM, dated 31 January 2019
- The Executive Decree on State Land Lease and Concession Fees Rate, No. 02/PR, dated 18 November 2009
- The Decree on Occupational Health and Safety, No. 22/GOL, dated 5 February 2019
- The Decision on the Management of Quality Standards for Drinking Water and Household Water Supply, No. 1371/MOH, dated 4 October 2005
- The Decree on National Environmental Standards, No. 81/GOL, dated 21 February 2017 ("Lao National Environmental Standards")
- The Regulation on Logging and Clearance after Logging for a Hydropower Power Project Reservoir Area, No. 0112/MAF, dated 25 November 2008
- The Agreement for Occupational Health and Safety at Construction Sites No. 3006/MLSW, dated 21 August 2013
- Other Applicable Laws

#### 2. GOL Guidelines:

- Technical Guidelines on Compensation and Resettlement of People Affected by Development Projects, MONRE, dated June 2011
- National Policy on Health Impact Assessment, No. 365/MOPH, dated 1 March 2006
- Practical Guidelines on Health Impact Assessment in the Lao PDR, No. 269/HPD, dated August 2010
- 3. IFC Performance Standards:

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts (2012)
- Performance Standard 2: Labour and Working Conditions (2012)
- Performance Standard 3: Resource Efficiency and Pollution Prevention (2012)
- Performance Standard 4: Community Health, Safety, and Security (2012)
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012)
- Performance Standard 7: Indigenous Peoples (2012)
- Performance Standard 8: Cultural Heritage (2012)

#### 4. IFC General Environmental, Health, and Safety Guidelines:

- IFC Environmental, Health, and Safety Guidelines: General EHS Guidelines, Section 1.1 Air Emissions and Ambient Air Quality, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.3 Wastewater and Ambient Water Quality, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.5 Hazardous Materials Management, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.6 Waste Management, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.7 Noise Management, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.8 Contaminated Land, 30 April 2007
- IFC Environmental Health and Safety Guidelines: Electric Power Transmission and Distribution, 30 April 2007
- IFC Environmental Health and Safety Guidelines: Waste Management Facilities, 10 December 2007
- IFC Environmental Health and Safety Guidelines: Water and Sanitation, 10 December 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.2 Energy Conservation, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 1.4 Water Conservation, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 3.0 Community Health and Safety, 30 April 2007
- IFC Environmental Health and Safety Guidelines: General EHS Guidelines, Section 4.0 Construction and Decommissioning, 30 April 2007
- IFC Environmental Health and Safety Guidelines: Toll Roads, 30 April 2007
- IFC Environmental Health and Safety Guidelines: Construction Materials Extraction, 30 April 2007
- IFC Environmental, Health, and Safety Guidelines: General EHS Guidelines, Section
   2.0 Occupational Health and Safety, 30 April 2017



IFC Environmental Health and Safety Guidelines: Environmental, Health, and Safety Guidelines for Wind Energy, 7 August 2015

# 5. ADB Applicable Standards:

- ADB's Safeguards Policy Statement (June 2009)
- Access to Information Policy (2018)
- Social Protection Strategy (2001)
- Gender and Development Policy (1998)
- Accountability Mechanism Policy (2012)

# 6. Other International Standards and Guidelines:

- ISO 14001:2015 Environmental management systems
- ISO 1996-1:2016 Acoustics Description, measurement and assessment of environmental noise Part 1: Basic quantities and assessment procedures
- ISO 1996-2:2017 Acoustics Description, measurement and assessment of environmental noise Part 2: Determination of environmental noise levels
- IEC 61672-1 Electroacoustics Sound Level Meters Part 1: Specifications
- IEC 61672-2 Electroacoustics Sound level meters Part 2: Pattern evaluation tests
- IEC 60942 IEC 60942 Electroacoustics Sound calibrators

# 1. Requirements to ESMMP-CP and ESMMP-OP

#### VOLUME I: OBLIGATIONS, PLANS, AND PROGRAMS

- 0.0 Terms and Definitions
- 1.0 General
  - 1.1 Project Profile, Maps, and Project Operations, including Construction / Operational Work Plans and Schedules
  - 1.2 Purpose of this ESMMP-CP/ESMMP-OP
  - 1.3 Scope of the ESMMP-CP/ESMMP-OP and List of all Sub-plans
- 2.0 Policy

This part shall contain a representation by the Company that the ESMMP-CP/ESMMP-OP is in all material respects, clear, complete, accurate, and not misleading; that it complies with the Company's Environmental and Social Management System; that it is professionally created by duly qualified consultants and experts; and that it complies with Standards, including Applicable Laws.

- 2.1 The Company's Environmental Policy Statement
- 2.2 Corporate Environmental Commitments
- 3.0 Legal and other requirements including statutory requirements, approvals, permits, and licenses
  - 3.1 Applicable Laws
  - 3.2 Other Standards
- 4.0 ESMMP-CP/ESMMP-OP Organizational Structure, Roles, and Responsibilities

This part shall describe the Company's organization and contain specification of capabilities, support mechanisms, and resources necessary to achieve the Company's environmental policy, objectives, and targets, including the definition of: a) responsible personnel with appropriate knowledge, skills, and training for specific tasks; and b) communication and reporting responsibilities.

- 5.0 Authorities and other Stakeholders
- 6.0 Overview of Measures and Monitoring
  - 6.1 Overview of Adverse Impacts and Measures

Identification of the environmental aspects of the Company's work and identification and evaluation of the Project impacts (including environmental Adverse Impacts) that the Company's activities, the Project and activities related thereto will have on the physical, biological, social and socio-economic environment and conditions.

Measures which the Company is responsible to perform, including environmental plans and management programs addressing the Measures, which are to be addressed by the Company.

Overview maps and layout drawings in suitable scale, aerial photos or high-resolution satellite images with project construction facilities and work sites superimposed.

6.2 Overview of Environmental and Social Monitoring

#### 7.0 Subplans

The subplans shall include objectives and time-scaled targets. They shall identify, map, and describe Project operations and schedules. They shall clearly identify and characterize impacts and risks and their causes / possible causes and include plans and measures to ensure full compliance with Standards, including without limitationemission limit values for discharges to water and to air, quantities of such discharges, waste management, ambient water, air and noise limits or standards, and any other measures necessary for environmental protection.

The subplans shall contain all necessary engineering drawings, specifications, layout plans, location maps, cross-sections, transects, aerial photos, and satellite imagery. Such items shall be in proper scale and layout design for use by managers, field officers, and regulators (MONRE Officers).

Staffing, qualifications and responsibilities for project operations, monitoring, checking, and control shall be clearly accounted for.

- 7.1 Erosion and Sediment Management Plan
- 7.2 Noise, Air Blast, and Vibration Management and Monitoring Plan
- 7.3 Air Emissions Management Plan
- 7.4 Effluents and Surface Water Management and Monitoring Plan
- 7.5 Groundwater Management and Monitoring Plan
- 7.6 Landfills and Spoil Disposal Sites Management Plan
- 7.7 Solid and Hazardous Waste Management
- 7.8 Fuel and Hazardous Material Management and Monitoring Plan
- 7.9 Transmission Line Corridor Management Plan
- 7.10 Camps Management Plan
- 7.11 Biodiversity Management Plan
- 7.12 Transport and Traffic Safety
- 7.13 Capacity Building Plans and Programs
- 7.14 Labour and Personnel Management
- 7.15 Occupational Health and Safety
- 7.16 Community Health and Safety
- 7.17 Rehabilitation and Decommissioning
- 7.18 Emergency Preparedness and Response Plan



#### **VOLUME II: PROCEDURES**

#### 8.0 Implementation and Operation:

This part shall contain procedures for how the Company will measure, monitor, and evaluate its environmental performance, including corrective and preventative action procedures. It shall contain details of how the Company will develop, review, and improve its ESMMP-CP/ESMMP-OP, with the objective of improving its overall environmental performance, and details of its auditing policies and programs.

- 8.1 Competence, Training, and Awareness
- 8.2 Internal and External Communication
- 8.3 Documentation (GIS, GPS, photos, video recording, forms, and reports etc.)
- 8.4 Control of Documents
- 8.5 Operational Control
- 8.6 Emergency Preparedness and Response
- 9.0 Checking:
  - 9.1 Monitoring; Measurements
  - 9.2 Evaluation of Compliance
  - 9.3 Non-compliance, Corrective Action, and Preventative Action
    - 9.3.1 Non-compliance Level and Communication
    - 9.3.2 Non-compliance Procedure
  - 9.4 Control of Records
  - 9.5 Internal Audit
  - 9.6 External Audit
- 10.0 Management Review
- 11.0 Cross Reference of ISO 14001:2015
- 12.0 Cross Reference to Standards



#### 1. Biodiversity Offset Plan (TBD)

#### **Biodiversity Offset**

#### a) Biodiversity Survey

- (i) The Company shall prepare baseline biodiversity data (if none has previously been prepared) or otherwise prepare an update of the baseline biodiversity data in various Project-impacted areas, including: (i) construction of wind tower areas, including all areas earmarked for quarry and disposal sites, (ii) access roads to wind towers, and (iii) the transmission line corridor and adjoining areas.
- (ii) Following the Company's baseline biodiversity preparation or update, as the case may be, within the Project-impacted areas, the Company shall provide financial support to the GOL sufficient to, and subject to receipt of which the GOL shall, through the appropriate line agency(ies), undertake and complete all required additional surveys and studies to identify biodiversity offsets, in order to achieve no net loss of the affected biodiversity.

#### b) Biodiversity Offset Plan

- (i) Based on the assessments contained in the biodiversity baseline survey, the Company, in good faith consultation, shall prepare and propose the Biodiversity Offset Plan (if required) in strict compliance with the additional Project obligations and submit it to the Ministry of Agriculture and Forestry for review and approval.
- (ii) The Company shall incorporate such approved the Biodiversity Offset Plan into the ESMMP-CP and ESMMP-OP and deliver them for the MONRE's approval pursuant to the timeline specified in this Annex C for the ESMMP-CP and ESMMP-OP.
- (iii) The Biodiversity Offset Plan shall, at a minimum, characterize existing conditions, define management objectives, set goals and propose solutions, develop and implement protection or remediation strategies as necessary, and define the evaluation and the adaptive measures to be undertaken. In its preparation of the Biodiversity Offset Plan, the Company shall prepare and implement a wildlife rescue plan acceptable to the GOL, if such a plan is recommended in the biodiversity survey or by the MONRE.
- (iv) The Company and the GOL shall meet to discuss and determine, in good faith, the location for the implementation of the Biodiversity Offset Plan, which may be located within the Project Site or outside the Project Site.
- (v) If the location for Biodiversity Offset Plan implementation is located within the Project Site, the Company shall be solely responsible for the implementation of every component of the Biodiversity Offset Plan.
- (vi) If the location for Biodiversity Offset Plan implementation is located outside, or partially outside, the Project Site, with the Company's financial support, the GOL shall have the option either to implement that portion of the Biodiversity

Offset Plan which is outside the Project Site by itself or to engage a third-party expert to implement such portion of the Biodiversity Offset Plan in accordance with the timelines specified in the assessments and plans.

- (vii) In circumstances where a third-party expert has been engaged, the following conditions shall apply:
  - 1. The GOL will, in consultation with the Company, develop terms of reference and administer the procurement, at the Company's cost, of one or more third party experts to implement the Biodiversity Offset Plan, as appropriate, provided that the Company may request an opportunity to provide comment to the GOL on such terms of reference.
  - 2. The GOL will appoint such third-party expert based on the GOL's evaluation of technical and financial proposals from eligible bidders.
  - 3. The third-party expert will be contracted by the GOL, and the Company will also be a signatory to such contract as the payer of the contract.
  - 4. The Company shall provide the third-party expert with all relevant and all reasonably requested data and documentation in order to facilitate the GOL's implementation of the Biodiversity Offset Plan.

#### 1. CATEGORY -- Entitlements Matrix

The Project is not expected to cause a physical displacement of households as it affects only land use of local people in areas adjacent to the Project Site.

### Eligibility:

Households that meet the following criteria are eligible for compensation from the Project:

- (i) persons with formal legal rights to land that is lost in its entirety or in part;
- (ii) persons that have lost the land that they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and
- (iii) persons that have lost the land that they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land.

The involuntary resettlement requirements will apply to all three types of displaced persons.

#### Cut-off Date:

- Eligibility will be determined with regards to the "Cut-off Date", which will be the final day of the detailed measurement survey of the Project.
- The Project's detailed measurement survey was conducted from 17 May 2022 to 21 June 2022 in Dak Cheung District, and from 14 to 18 June 2022 in Sanxay District.
- All PAPs identified as of the Cut-off Date will be entitled to compensation for their affected assets, and rehabilitation measures sufficient to assist them to improve or at least maintain their pre-Project living standards, income-earning capacity, and production levels.

# 2. Eligibility and Entitlement Matrix:

Type of Loss	Entitled Persons/Entity	Compensation Policy
Loss of agricultural land (title holders)	<ul> <li>Owners with legal title to the land; or</li> <li>Persons that are eligible to have land legal titles allocated as regulated by the Land Law; or</li> <li>Persons that have claims to such lands that are recognized or recognizable under national laws.</li> </ul>	<ul> <li>Cash compensation at the replacement cost for the affected area or land for land compensation where feasible.</li> <li>For replacement land, land titles will be provided, with all related costs borne by the Company.</li> <li>Includes the option of compensation to those persons that are affected by land remaining after the Project's acquisition that is no longer viable (for severe loss of agricultural land i.e., loss of more than 10% of total</li> </ul>

Loss of	Displaced persons	<ul> <li>productive assets).</li> <li>Compensation at the full replacement</li> </ul>
agricultural land (non- title holders)	without legal title to the land.	cost for the non-land assets.
Temporary loss of agricultural land	All affected peoples (title holders and non-title holders).	<ul> <li>Provision or land rental value based on the prevailing lease rate at the time of temporary use in similar locations during the duration of the use or temporary acquisition of the land.</li> <li>Land used temporarily will be returned to the users after being restored to the original condition or, preferably, after being rehabilitated to a better condition.</li> </ul>
Agricultural land within the ROW of the transmission line	All affected peoples (title holders and non-title holders).	<ul> <li>For land affected by underground cables, agricultural land will be compensated for as a permanent loss for the title holders because the PAHs can no longer use the land due to the concrete structure built over the underground cables. Non-title holders will be compensated for their non-land assets.</li> <li>For land affected by overhead transmission lines, agricultural land will be compensated for as a temporary loss.</li> <li>Crops and trees will be compensated for according to the type of crops/trees and the type of loss (temporary or permanent).</li> <li>Community forest land affected by the ROW will not be eligible for compensation per Lao PDR law. The community forest land will be included in the land conversion agreement with the GOL in the Concession Agreement. If trees of such forest lands are privately owned, compensation will be provided to the individuals for the loss of such trees.</li> </ul>



Loss crops and trees	Persons/households     whose crops     (annual/perennial) and     trees are affected by the     Project.	<ul> <li>For affected trees, cash compensation at the market rate in the local area (Dak Cheung District and Sanxay District).</li> <li>Cash compensation for perennial crops and fruit bearing trees based on the annual net product market value multiplied by five (5) years.</li> <li>For timber trees, cash compensation at the replacement cost equal to the current market prices based on type, age, and diameter at breast height of the trees.</li> <li>Notice to harvest annual crops, if possible.</li> <li>For annual crops that cannot be harvested, cash compensation equivalent to the current market prices, multiplied by the average yield/crop calculated over the past three (3) years.</li> </ul>
Vulnerable households	Households that are categorized under the vulnerable criteria.	<ul> <li>Land-for-land option will be a guaranteed option for vulnerable displaced persons.</li> <li>Additional allowance for loss of land or structures.</li> <li>Vulnerable households will receive priority in any employment required for the Project.</li> </ul>

# 1. Budget

# I. Estimated Funding for Company's Environmental and Social Management

Activities	Construction Period	OperatingPeriod	Total				
Budget for Environmen	Budget for Environmental Activities						
Company's environmental and social management, coordination and communication	210,000.00	750,000.00	960,000.00				
Company'sforest management	35,000.00	125,000.00	160,000.00				
Company's water quality monitoring	35,000.00	125,000.00	160,000.00				
Company's enhancing of environmental awareness and environmental and social strengthening programs	30,000.00	25,000.00	55,000.00				
Total	310,000.00	1,025,000.00	1,335,000.00				

# II. Estimated Funding for Company's Compensation and Livelihood Restoration Obligation:

Activities	Amounts (USD)
Livelihood Restoration Plan	165,000
Company's public health management (OHSO)	80,000
Company's compensation and livelihood restoration obligation to affected villages	935,000
Total	1,180,000





# III. Estimated Funding for Company's community development Obligation:

Activities	Amounts (USD)
community development Programme, beginning from COD	1.100.000

Remark: the budget mention in Clause 4.18 of the CA

# IV. Funding for GOL's Environmental Monitoring:

The Company shall make available to the relevant authorities (as set forth in the table below) the following budget amounts during the Construction Period and Operating Period.

Description	Unit	Construction Period 3 years	Operation Period 5 years	Operation Period 20 years	Total
500kV Transmission Line (no	o. 2036, d	dated 21/7/2022)			
Budgets for Central level	USD	11,736.00	22,560.00		34,296.00
Budgets for Provincial level (Sekong Province)	USD	10,264.00	13,940.00		24,204.00
Budgets for District level (Dakcheung District)	USD	58,060.00	13,600.00		71,660.00
600MW Wind Farm(no. 2034	1, dated 2	20/7/2022)			
Budgets for Central level	USD	14,180.00	22,300.00	80,200.00	116,680.00
Budgets for Provincial level (Sekong Province)	USD	11,146.00	10,910.00	46,640.00	68,696.00
Budgets for Provincial level (Attapeu Province)	USD	11,164.00	10,940.00	46,760.00	68,864.00
Budgets for District level (Dakcheung District)	USD	9,960.00	8,600.00	25,400.00	43,960.00
Budgets for District level (Sanxay District)	USD	14,748.00	16,580.00	54,320.00	85,648.00
Total		141,258.00	119,430.00	253,320.00	514,008.00

Remark: The budgets mentioned above was agreed with GOL.

Description	Unit	Construction Period 3 years	Operation Period 2 years	Total
Total budgets for independent monitoring activities-IMA	USD	100,000.00	50,000.00	150,000.00
Total				150,000.00

Remark: The budgets mentioned above was agreed with GOL.Not later than 2 years prior to its scheduled expiration of the Concession Period, the Project Company is required to discuss with MONRE on a budget for IMA in order to assess environmental and social management monitoring before Handover and Decommissioning.

# V. Funding for Environmental Protection Fund (EPF):

The Company shall make available to the Environmental Protection Fund the budget amounts as set forth in the table below.

Activities	Annual Contribution from PCOD until the end of the Concession Period (USD)	Total (USD)
Contribution to the Environmental Protection Fund	35,000 per year	875,000.00

Remark: The budgets mentioned above was agreed with GOL.

# VI. Funding for Compensation Committee and CMU during the Construction Period:

No	Budget	Total (USD)	
1	Compensation Committee, CMU	45,000.00	

# VII. Company Funding for GOL's activities relating to the Forest Protection and Management Plan

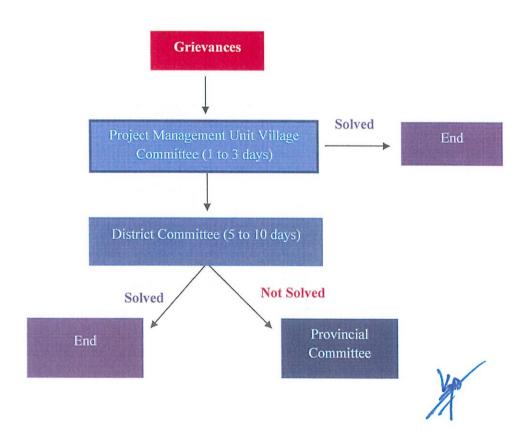
No.	Description	Unit	Unit rate	Total	Payment period
1	Reforestation	554.55 ha	12,000,000 Kip/ha	6,654,600,000 Kip	Year 2-4
2	Forest and wildlife management	28 years	15,000 USD/year	420,000 USD	Year 1-28
3	Forest land conversion fee	754,100.00 m <sup>2</sup>	15,000 Kip/m <sup>2</sup>	11,311,500,000 Kip	Year 1

Remark: The budgets mentioned above was agreed with GOL.



Grievance Redress Mechanism This grievance redress mechanism aims to ensure that there is a robust and transparent process available for addressing complaints. This system comprises a sequential process of three (3) levels of resolution. The next level of resolution is triggered if the complaint cannot be resolved at a lower level.

- Step 1: Receive and Acknowledge Grievance
- Step 2: Assess Grievance and Assign Priority and Responsibility
- Step 3: Investigate and Propose Resolution
- Step 4: If the Complainant does not accept the Proposed Resolution, develop a Solution to the Grievance
- Step 5: Implement the Solution
- Step 6: Grievance Close Out and Documentation



#### Penalty Regime

#### 1. Rationale for Penalties

Penalties are intended to provide (i) an early warning mechanism for the benefit of both the Company and the GOL in regard to matters which might otherwise have led to a material breach or non-compliance withthe Company's obligations, and (ii) a meaningful incentive for the Company to promptly and fully remedy any breaches or non-compliance with the Company's obligations, and to pro-actively address and effectively resolve the underlying causes of such breaches or non-compliance to avoid future recurrences.

#### 2. Right to Impose Penalties

- a) The Implementing Agency, through consultation with the GOL, shall have the right to impose penalties on the Company as provided in this Clause 2 for any breach, non-compliance, or other performance failure as specified in this Appendix 8 of Annex C.The Implementing Agency, through consultation with the GOL, shall use reasonable efforts to analyse such factors as it deems relevant to the imposition of penalties, and to impose penalties in a fair, transparent, and consistent manner.
- b) The levels of penalties payable to the Implementing Agency are set forth in this Appendix 8. All levels of penalties shall be adjusted annually based upon changes in CPI as calculated from the Agreement Date.
- c) The Implementing Agency's right to impose penalties on the Company shall also apply retroactively to any breach or non-compliance of any obligation contained in this Annex C which was committed by the Company prior to the Effective Date.
- d) With respect to the first occurrence of any such breach or non-compliance, penalties will only be imposed upon the expiration of a reasonable cure period of up to thirty (30) days following the Company's receipt of the enforcement notice (provided that if such breach or non-compliance cannot be cured within such period of thirty (30) days with the exercise of all reasonable efforts on the part of the Company, then an additional remedy period not to exceed twenty (20) days will be granted). For the avoidance of doubt, the Company shall not be entitled to any cure period with respect to any recurrence of a breach or non-compliance that takes place within ten (10) years from the date of the initial breach or non-compliance.
- e) The Company shall not be subject to penalties to the extent that the Company's breach or non-compliance solely results from actions or omissions of the GOL or a Force Majeure event, provided that the procedures specified for Force Majeure under the Concession Agreement have been duly complied with by the Company and provided, further, that as soon as the Force Majeure has ended the Company shall immediately rectify such breach or non-compliance.
- f) For the avoidance of doubt, the Company shall not be entitled to any Change in Law protection under the Concession Agreement in respect of the payment of any penalty, but shall nonetheless be entitled to Change in Law protection if and only to the extent



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of any increase in the penalty amount beyond that which is currently provided in Appendix 8 hereto (excluding CPI adjustments).

- g) The timing for payment of penalties shall be within thirty (30) days of the date of the Company's receipt of an enforcement notice demanding the payment of such penalties.
- h) Notwithstanding its right to impose penalties, the Implementing Agency, through consultation with the GOL, shall also have the right to step in and correct the breach at the expense of the Company after the expiration of the applicable cure period.

#### 3. Non-Cumulative Penalties

- a) Penalties are in addition to any costs of remediation, clean-up, and compensation that the Company shall be liable for under this Annex C and the Applicable Laws.
- b) Penalties are in addition to any amounts that may have been included in any budget committed to be payable by the Company.
- c) Penalties are in addition to any penalties that may be imposed by Applicable Laws and the Concession Agreement.
- d) The payment of penalties by the Company shall not relieve the Company of any liability for claims that may be asserted against the Company by third parties with respect to damage incurred and/or injury suffered arising out of the Company's performance or any breaches or non-compliance by the Company of Project obligations.

Penalties applicable to the Project may be applied (when the underlying basis for doing so exists as provided in Annex C and this Appendix 8) at the discretion of the Implementing Agency through consultation with the GOL, and shall include without limitation the following:

For the avoidance of doubt, the penalty amount that will be imposed pursuant to this Appendix 8 will be calculated on a project-by-project basis.

#### **Aggravating Factors**

Aggravating factors that the Implementing Agency shall consider in the determination and imposition of the penalty amount includes, without limitation:

- a) deliberation;
- b) history of non-compliance; and
- c) potential to cause serious damage to environment, human, health and livelihoods.

#### **Further Sanctions**

In addition to the penalty(ies) to be imposed under this Appendix 8, the Implementing Agency, through consultation with the GOL, shall be entitled to impose other sanctions for the non-compliance of the Company, including without limitation to:

- a) suspendan Authorization in whole or in part;
- b) revokean Authorization in whole or in part; and
- c) claim for a breach of contract under Annex C and the Concession Agreement.

Non-Compliance	Amounts in US\$ Minimum and Maximum
Failure or delay in the timely submission of the quarterly / annual report as required under Annex C	500 to 1,000 Plus 100 per day until cured
Obstruction or interference with an official in the course of his or her duties in connection with Annex C	500 to 5,000
Providing false or materially misleading information to the GOL or any GOL representative in connection with the topics addressed in Annex C	1,000 to 5,000
Failure to provide information to the GOL inspector or any GOL representative, including any Monitoring Agency(ies) when requested in regard toinspection and monitoring as provided in Annex C	1,000 to 5,000
Failure or delay to submit draft ESMMP-CP and ESMMP-OP for approval within stipulated time period	5,000 Plus 100 per day until cured
Operating/implementing without a permit or Approval by MONRE of the ESMMP-CP and ESMMP-OP	5,000 Plus 100 per day until cured
Failure to comply with condition in the ECC	5,000 Plus 100 per day until cured
Failure to provide information to MONRE inspector, or any representative including Monitoring Agency when requested in regard to inspection and monitoring as provided in this Annex C	5,000 Plus 100 per day until cured
Undertaking or allowing any Contractor or Subcontractor to undertake any construction works without holding the relevant Authorization required from the permit by the GOL	1,000 to 5,000 Plus 200 per day until cured



Non-Compliance	Amounts in US\$ Minimum and Maximum
Operating activities that require an Authorization from the GOLwithout holding such relevant Authorizationrequired from the GOL	1,000 to 5,000 Plus 200 per day until cured
Non-compliance with an enforcement notice pursuant to a violation of Annex C	2,000 to 10,000 Plus 200 per day until cured
Failure to notify the GOL of any knowledge of breach or non-compliance found during the self-monitoring within the timeline as required under Clause 12 of Annex C	1,000 to 5,000
Failure to take reasonable steps or actions to prevent an imminent threat of damage to the environment, human health, livelihoods, or property, where applicable, based on the assessments and plans	2,000 to 10,000
Failure to comply with conditions in the Environmental Compliance Certificate, Authorizations, or Standards, in particular the emission limit values as defined therein (per single violation / instance)	1,000 to 10,000
Failure to deliver and provide to the entitlements to PAPs as and when required in Annex C and the ESMMP	1,000 to 10,000

