

# Environmental and Social Monitoring Report

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Semi Annual Report  
October 2018

## FSM: Yap Renewable Energy Development Project

Prepared by Mr. Victor Nabeyan, Assistant General Manager, Yap State Public Service Corporation for the Government of the Federated States of Micronesia and the Asian Development Bank.

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# **Safeguards Monitoring Report**

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Semi-Annual Report  
July - December 2017

## **FSM: Yap Renewable Energy Development Project**

Prepared by Victor Nabeyan, Assistant General Manager  
Yap State Public Service Corporation



# Semi-annual Safeguards Monitoring Report Yap Renewable Energy Development Project July - December 2017

| Heading/Section | Contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Introduction    | <p><b><i>Reporting Period.</i></b></p> <p>This report covers the period from July 2017 to December 2017.</p> <p><b><i>Brief background on the project and subprojects.</i></b></p> <p>The project is that part of the Yap State Renewable Energy Development Plan financed under two ADB loans to the Yap State Government (loan numbers 3004-FSM and 3005-FSM), aimed at reducing fossil fuel consumption, and stabilizing electricity tariff during spikes of fossil fuel costs in the global market, in Yap State through the development and employment of renewable energy, and at improving the efficiency of electricity generation. The project is being undertaken on the main island of Yap (Yap Proper), and it includes (i) construction of an .825kW wind farm<sup>1</sup>, (ii) construction of 300 kW grid-connected solar power, (iii) installation of a high-speed diesel generators<sup>2</sup> to improve the efficiency of the current grid, (iv) the installation of an integration and control system to manage the integrated system, and (v) capacity building within the power utility and communities.</p> <p><b><i>Progress status.</i></b></p> <p>1). <i>Engineering consultancy.</i> Entura, an engineering firm based in Tasmania, Australia, has been hired by YSPSC, with the approval of ADB, is EA's owner's engineer for the project.</p> <p>2). <i>Solar component.</i> An ICB tender for the supplies for solar power component of the project was completed, the Bid Evaluation Report was submitted to and approved by ADB, contract negotiations were completed, and a supply contract was awarded to Sunlabob. Sunlabob has delivered all the main supplies (PV modules, electronics, wirings and cables), which have been provisionally accepted by the EA. The supply of the Balance of Plant (e.g. PV frames, conduits, screws, panel boxes, fuses, tools, transformers ... etc.), following competitive shopping for quotations, were awarded to 2 companies: (1) Sunlabob for PV frames, screws, tools and other non-electrical supplies, and (2) Dateline for electrical supplies. All the BOP arrived and were accepted by the EA on 29 January 2017.</p> <p>The EA is responsible for the installation of the solar PV systems on government buildings that were pre-selected following the PPTA assessment and an engineering re-assessment by Entura. The EA entered into a 30-year lease with Yap State on 17</p> |

<sup>1</sup> Under the original project design, the wind farm was for a capacity 1.4 MW. However, following due diligence, it was determined that only .825 kW could be accommodated due to site restrictions posed by earthwork constraints and the preservation requirements for WWII historic properties.

<sup>2</sup> The initial diesel concept was for a 1.8 MW medium-speed diesel. This was changed during final project design to 1 x 1.6 MW and 1 x .830 MW high-speed diesels. The 1.6 MW is serving as the baseload plant, while the .830 MW comes online when needed for peak load. Their high-speed RPM allow for instantaneous response to cover the intermittency of wind and solar.

# Semi-annual Safeguards Monitoring Report

## Yap Renewable Energy Development Project

### July - December 2017

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|  | <p>October 2014 for use of the roofs of the pre-selected buildings. A copy of the lease had been furnished to ADB. No resettlement was caused by the execution of the lease, nor any will be caused by EA's exercise of its rights and obligations thereunder.</p> <p>The status of the installations and commissioning of the PV systems and their performance ratio are as follows:</p> <ul style="list-style-type: none"> <li>a) 26 kWp was installed and commissioned on the Public Works' Construction and Engineering Office in April 2017. During the period of this report, its average monthly performance ratio is 51% of capacity;</li> <li>b) 25 kWp was installed and commissioned on the Division of Public Safety Building in April 2017. During the period of this report, its average monthly performance ratio is 57% of capacity;</li> <li>c) 13 kWp was installed and commissioned on the Water Treatment Plant in April. During the period of this report, its average monthly performance ratio is 57% of capacity;</li> <li>d) 50 kWp was installed and commissioned on the Early Childhood Education Building in April 2017. During the period of this report, its average monthly performance ratio is 55% of capacity; and</li> <li>e) Following delays occasioned by roof renovation works by the Yap government at the Sports Complex Gym, the EA has begun installation of the balance of the PV system on the Gym. The EA anticipates completing the installation and system commissioning in February 2018.</li> </ul> <p>3). <i>Wind component.</i></p> <p>(a). <i>Tender of turbines.</i> Tender for the wind turbines was completed, the Bid Evaluation Report was approved by ADB for bid award to Vergnet for three 275 kW wind turbines, contract negotiations with Vergnet were completed, and a supply and install contract was executed by the EA and Vergnet, with a No Objection from ADB. All the wind turbines and their balance of plants had been delivered to Yap.</p> <p>(b). <i>Earthworks.</i> The EA contracted a local company, Waab Construction Company (WCC) on 22 November 2016 to do the wind farm Site earthworks, and additional access road works in Nimar village necessary for hauling of turbine blades and other wind farm equipment and supplies to site. This additional access road works entailed the cutting of trees, vegetation and crops and a total of 50 cubic yards of backfilling at road curves in Nimar village. The EA held a consultation meeting with Nimar village leaders and the pertinent landowners on 30 September 2016 concerning the additional access road works. At the meeting, the Nimar village leaders and landowners agreed that the EA will proceed with the additional access road works with compensation to each landowner at the sum of USD 750.00 for the crops and trees to be cut. The EA paid each landowner the agreed amount on 3 October 2016.</p> <p>EPA approved WCC's CEMP for the Site earthworks and additional access road works on 21 December 2016. These works were completed on 6 March 2017. EPA was satisfied that the contractor complied with mitigation measures during the course of the</p> |
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**Semi-annual Safeguards Monitoring Report  
Yap Renewable Energy Development Project  
July - December 2017**

works by using silt fences and mulching, and by ceasing works during rain. No violation of a CEMP requirement was noted either by EPA or the EA.

(c). *Land acquisition.* The EA entered with the registered landowners into a 20-year lease, with a renewal option for another 20-year term in EA's favor, on 5 June 2013, for an area of 63,342 square meters on Kabul and Madeqdeq ridges, which was pre-determined under the PTTA as the feasible wind farm site. The acquisition of the lease comported with Land Acquisition Procedures set out in the RP, as edited by the EA.

The lease vests the EA leasehold rights to install, maintain, and operate renewable energy systems in the leasehold area, and neither the execution of the lease nor the exercise by EA of its rights or obligations thereunder, nor the use by EA of the leasehold area caused or will cause any resettlement or physical displacement, involuntary or otherwise. The lessors also own the parcel of ridgeline land abutting the wind farm leasehold area and the end of the pre-existing road from Nimar village to the Merry Tower. The lease between the EA and the landowners also vests the EA easement of access to and from the wind farm. A copy of the lease had been furnished to ADB.

The EA is compensating the landowners by rent payment of USD25,000.00 per annum. The 20-year initial term of the lease will net the landowners a total of USD500,000.00, which is equivalent to the valuation of the land as per DLR's land valuation chart (referenced in the RP). Under the agreed terms of the lease, the EA has the right, where necessary for the construction, operation, and maintenance of the wind farm, to cut and remove vegetation and trees from the wind farm site, and the abutting access easement area, without further compensation to the landowners.

(d). *Road access.* Road access works had been completed under the safeguards reported in the Semi-Annual Report for period July – December 2016.

(3). *Turbine Installation.* The contractor has 245 days to complete the project from the effective date of its contract. The contract effective date was 24 August 2016, the date on which the advance payment was made to Vergnet.

Installation began in March 2017, with Waab Transportation Company doing the concrete civil works under a subcontract with the contractor. Erection of the three wind turbines began in July, 2017, and anticipated completion of installation by September 2017. But as of December 2017, completion was at 90%. The installation had been delayed due to inclement weather and construction hold ups by the contractor.

4). *Integration and control component.* Tender for the Integration and Control System (I&C) was completed, the Bid Evaluation Report was approved by ADB for bid award to Vergnet, contract negotiations were completed, and the EA and Vergnet has executed a supply and installation with a No Objection from ADB. At a kick-off meeting between Vergnet, Entura, and the EA held in Yap from 31 August to 7 September 2016, it became apparent that there is a question whether it is Vergnet or EPSA (the diesel project contractor) who is responsible for procuring, installing, and programming the hybrid software on the master ComAp control, which will be necessary to regulate diesel spinning reserve and diesel generator scheduling. In contract negotiations between the

**Semi-annual Safeguards Monitoring Report  
Yap Renewable Energy Development Project  
July - December 2017**

EA and Vergnet, following the kick-off meeting, a variation was made to Vergnet's contract, giving the responsibility for the supply, installation, and programming of the hybrid software to Vergnet. The increase in price resulting from the variation of the scope of works did not exceed 15% of the original contract price.

Contractor commenced installation in September 2017, and was completed in early April 2018. Commissioning of the I&C was conducted on 26-28 April 2018, under the observation of Entura and the EA's own electrical engineer. The commissioning was successful, and Entura came to the determination that the system is performing to technical requirements. See attached Entura commissioning report.

5). *Diesel generators.* Installation of the diesel generators and switchgear was successful and certified by the EA to be completed on 28 March 2017. Following the certification of completion of installation, commissioning of the generators and switchgear was conducted and successfully completed by the contractor on 25 May 2017. Thereafter, the EA issued to contractor a certificate of acceptance of the assets, effective as of the date of the completion of commissioning. The new diesel generators, along with another 1.6 MW diesel generator concurrently installed and commissioned under a World Bank project, are now the primary sources of generation, with the old Deutz generators being put offline for repair and reserve capacity.

***The project's category and planning documents (original, updated or new plans) on resettlement impacts.***

The EA has updated the RP, dated March 2012, to conform with the land survey and registration process implemented by DLR pursuant to its own internal procedures, and the wind farm lease acquisition. A clean copy and a marked up copy of the updated RP, dated April 2014, was provided to and approved by ADB.

***Institutional arrangements and budget allocation for resettlement/social management.***

1). *Institutional Arrangements.* Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.

2). *Social management.* The EA has incorporated the GAP, in accordance with Clause VII of the PAM (as revised during the mid-term mission), into the solar and wind project components. Corrective actions were identified in the revised GAP for the EA to undertake. See item 7 for in the Summary and Conclusion below for status of the corrective actions.

***Arrangement for the monitoring.***

The criteria and requirements for monitoring and reporting set out in Clause XIV of the RP, dated March 2012, were followed. This clause remained unaltered in the updated RP mentioned above. In addition, with the support of Entura's specialists, PMU had been, in coordination with Yap State government line agencies, such as EPA, DLR, YVB, and HPO, ensuring compliance with the IEE, EMP, GAP, and other relevant provisions of the final

**Semi-annual Safeguards Monitoring Report**  
**Yap Renewable Energy Development Project**  
**July - December 2017**

|                       | RP. No violation of a safeguard or a project requirement has been cited by either the EA or one of the line government agencies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
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| Monitoring Activities | <p><b><i>Methodology for monitoring (whether checklists prepared etc.).</i></b></p> <p>1). <i>Land acquisition.</i> Below is the checklist for land acquisition:</p> <table border="1"> <thead> <tr> <th>S.N.</th><th>Activities</th><th>Status</th></tr> </thead> <tbody> <tr> <td>1</td><td>Identification of land requirement and land survey</td><td>Completed</td></tr> <tr> <td>2</td><td>Land valuation</td><td>Completed</td></tr> <tr> <td>3</td><td>Appointment of land acquisition team</td><td>Completed</td></tr> <tr> <td>4</td><td>Resolution of land ownership dispute: consultation with affected communities and agreement on land use/acquisition</td><td>Completed</td></tr> <tr> <td>5</td><td>Survey and registration of land by DLR, and DLR issuance of Certificate of Title to landowners as owners in fee simple in common</td><td>Completed</td></tr> <tr> <td>6</td><td>Negotiation with landowners on compensation (owners in fee simple in common)</td><td>Completed</td></tr> <tr> <td>7</td><td>YSPSC updates the RP in consultation with landowners, including agreement on compensation rate/package with landowners, and discloses updated RP to APs</td><td>Completed</td></tr> <tr> <td>8</td><td>YSPSC submits the updated RP to ADB for approval and posting on ADB website</td><td>Completed</td></tr> <tr> <td>9</td><td>Finalization and execution of wind farm lease</td><td>Completed</td></tr> <tr> <td>10</td><td>YSPSC submits copy of executed wind farm lease to ADB</td><td>Completed</td></tr> <tr> <td>11</td><td>Payment of compensation</td><td>Quarterly rent payment have begun as per lease</td></tr> </tbody> </table> <p>2). <i>Monitoring of constructions and installations.</i> Constructions and installations were monitored by the EA, Entura, and the Yap Government line agencies as follows:</p> <ul style="list-style-type: none"> <li>a). EA – Solar, Wind, Diesel, and Integration &amp; Control;</li> <li>b). Entura – Solar, Wind, Diesel, and Integration &amp; Control;</li> <li>c). Yap Environmental Protection Agency – Solar, Wind, Diesel, and Integration &amp; Control, with particular emphasis on Wind and Diesel;</li> <li>d). Yap Historic Preservation Office – Wind; and</li> </ul> |                                                | S.N. | Activities | Status | 1 | Identification of land requirement and land survey | Completed | 2 | Land valuation | Completed | 3 | Appointment of land acquisition team | Completed | 4 | Resolution of land ownership dispute: consultation with affected communities and agreement on land use/acquisition | Completed | 5 | Survey and registration of land by DLR, and DLR issuance of Certificate of Title to landowners as owners in fee simple in common | Completed | 6 | Negotiation with landowners on compensation (owners in fee simple in common) | Completed | 7 | YSPSC updates the RP in consultation with landowners, including agreement on compensation rate/package with landowners, and discloses updated RP to APs | Completed | 8 | YSPSC submits the updated RP to ADB for approval and posting on ADB website | Completed | 9 | Finalization and execution of wind farm lease | Completed | 10 | YSPSC submits copy of executed wind farm lease to ADB | Completed | 11 | Payment of compensation | Quarterly rent payment have begun as per lease |
| S.N.                  | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Status                                         |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 1                     | Identification of land requirement and land survey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 2                     | Land valuation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 3                     | Appointment of land acquisition team                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 4                     | Resolution of land ownership dispute: consultation with affected communities and agreement on land use/acquisition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 5                     | Survey and registration of land by DLR, and DLR issuance of Certificate of Title to landowners as owners in fee simple in common                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 6                     | Negotiation with landowners on compensation (owners in fee simple in common)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 7                     | YSPSC updates the RP in consultation with landowners, including agreement on compensation rate/package with landowners, and discloses updated RP to APs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 8                     | YSPSC submits the updated RP to ADB for approval and posting on ADB website                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 9                     | Finalization and execution of wind farm lease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 10                    | YSPSC submits copy of executed wind farm lease to ADB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Completed                                      |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |
| 11                    | Payment of compensation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Quarterly rent payment have begun as per lease |      |            |        |   |                                                    |           |   |                |           |   |                                      |           |   |                                                                                                                    |           |   |                                                                                                                                  |           |   |                                                                              |           |   |                                                                                                                                                         |           |   |                                                                             |           |   |                                               |           |    |                                                       |           |    |                         |                                                |

# Semi-annual Safeguards Monitoring Report

## Yap Renewable Energy Development Project

### July - December 2017

e). Yap Public Works Department – Solar (to monitor impact on roofing structures).

Monitoring was undertaken to ensure compliance with applicable Yap State laws and regulations and the project documents. No violation of an applicable law or of a project safeguard or requirement had been determined to have been violated.

***Period the monitoring covers.***

The following are the period for monitoring:

- a). Diesel Installation – October 2016 to March 2017;<sup>3</sup>
- b). Wind – October 2016 to December 2017;
- c). Integration & Control – October to December 2017; and
- d). Solar PV – October to December 2017.

***Main activities: site visits, consultations, surveys, etc.***

A task force comprising of a representative of the EA, DLR, HPO, YVB, EPA and the community have been formed to prepare a plan for the development of the historic properties on and around the wind farm as a tourism product. The task force is to develop a plan for:

- (a). The development of the sites of the historic properties with the view of protecting the properties, and making them accessible and conducive for tourism;
- (b). The maintenance of the historic sites;
- (c). A mechanism for levying and collecting historic site visit fees;
- (d). The apportionment of collected fees among/for the landowners and, community benefits, site maintenance, and tour guides' compensation;<sup>4</sup>
- (e). The hiring and training of tour guides (to be GAP-complaint at a minimum);
- (f). A budget for developing the historic sites;
- (g). The environmental and social safeguards for the development of the historic sites; and
- (h). Any other matter incidental to or necessary for the plan.

Wind farm site visits by the task force are as follows:

- 1 June 2017, to locate and inspect the WWII historic properties;
- 7 June 2017, to take GPS locations of and map historic properties, identify access paths to the historic properties, and gather site information for site development planning purposes; and
- 16 August 2017, to firm up preliminary site development plans.

<sup>3</sup> Installation and commissioning were completed successfully in March 2017.

<sup>4</sup> Where tour guides are employed by YVB rather than by private tour companies.



**Semi-annual Safeguards Monitoring Report  
Yap Renewable Energy Development Project  
July - December 2017**

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| Monitoring Results and Actions Required | <p><b><i>Progress and performance in implementation of LARP and other programs (how these were implemented, what are the outputs, etc.)</i></b></p> <p>Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.</p> <p><b><i>Results on consultations, disclosure, and grievance redress (whether they have been effective)</i></b></p> <p>Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.</p> <p><b><i>Whether the implementation comply with the approved LARP (e.g., whether compensation rates were at replacement cost, etc.)</i></b></p> <p>Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.</p> <p><b><i>Results on outcome (whether APs were able to restore livelihoods)</i></b></p> <p>Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.</p> <p><b><i>Compliance on monitoring and disclosure (whether reports have been submitted and posted on website)</i></b></p> <p>Same as reported in the January-June 2017 Semi-Annual Safeguards Monitoring Report.</p> <p><b><i>Whether any issues and corrective measures were identified to achieve the LARP objective. If yes, actions with target dates and responsible agency/person)</i></b></p> <p>None.</p> <p><b><i>Follow-up item/plan for next report</i></b></p> <p>No corrective action is required under the RP.</p> |                                               |                  |                         |                |                |  |          |                                               |                  |                         |
| Summary and Conclusions                 | <p><b><i>Summary of main findings</i></b></p> <p><b><i>Main issues identified and corrective actions noted</i></b></p> <p>No issues were encountered in the implementation of the RP and other RP safeguards that required corrective actions.</p> <p><b><i>The following is a table on follow-up actions concerning social and environment safeguards:</i></b></p> <table><tr><td></td><td><b>Item No.</b></td><td><b>Actions</b></td><td><b>By Whom</b></td><td><b>Remarks</b></td></tr><tr><td></td><td><b>1</b></td><td><b><i>Build protective shed for waste</i></b></td><td><b><i>EA</i></b></td><td><b><i>Completed</i></b></td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                               | <b>Item No.</b>  | <b>Actions</b>          | <b>By Whom</b> | <b>Remarks</b> |  | <b>1</b> | <b><i>Build protective shed for waste</i></b> | <b><i>EA</i></b> | <b><i>Completed</i></b> |
|                                         | <b>Item No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Actions</b>                                | <b>By Whom</b>   | <b>Remarks</b>          |                |                |  |          |                                               |                  |                         |
|                                         | <b>1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b><i>Build protective shed for waste</i></b> | <b><i>EA</i></b> | <b><i>Completed</i></b> |                |                |  |          |                                               |                  |                         |

**Semi-annual Safeguards Monitoring Report  
Yap Renewable Energy Development Project  
July - December 2017**

|  |          |                                                                                                                                                                                                                              |                                |                                                                                                                                                                                                                                                                                          |
|--|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |          | <b><i>oil storage at Power Plant</i></b>                                                                                                                                                                                     |                                |                                                                                                                                                                                                                                                                                          |
|  | <b>2</b> | <b><i>Provision of PPE for Power Plant staff</i></b>                                                                                                                                                                         | <b><i>EA</i></b>               | <b><i>Completed.</i></b>                                                                                                                                                                                                                                                                 |
|  | <b>3</b> | <b><i>Establishment of fire safety protocol for Power Plant</i></b>                                                                                                                                                          | <b><i>EA</i></b>               | <b><i>Completed.</i></b>                                                                                                                                                                                                                                                                 |
|  | <b>4</b> | <b><i>Equipping Power Plant with fire detection and fire-fighting equipment</i></b>                                                                                                                                          | <b><i>EA</i></b>               | <b><i>Procurement and delivery of Fire-fighting equipment completed. Procurement and installation of CCTV cameras in the powerhouse completed. Procurement of fire detection system pending.</i></b>                                                                                     |
|  | <b>5</b> | <b><i>GAP – Encourage participation of women in community project consultation meetings where appropriate</i></b>                                                                                                            | <b><i>EA</i></b>               | <b><i>Completed.</i></b>                                                                                                                                                                                                                                                                 |
|  | <b>6</b> | <b><i>GAP – As WWII historic properties at the wind farm location will be prepared, as part of the project, as a site for tourism, give necessary training and opportunities for women to make up 50% of tour guides</i></b> | <b><i>EA, HPO, and YVB</i></b> | <b><i>A task force comprising of a representative of the EA, DLR, HPO, YVB, EPA and the community have been formed to prepare a plan for the development of the historic properties on and around the wind farm as a tourism product. The task force has already begun its work.</i></b> |
|  | <b>7</b> | <b><i>GAP – hire female workers to make up at least 20% of the wind farm site clearing team, and hire and train women to make up 30% of the solar installation team</i></b>                                                  |                                | <b><i>Completed. 5 women were trained and took part in the installation of the solar systems, and were involved the wind farm site clearing work during project implementation.</i></b>                                                                                                  |
|  | <b>8</b> | <b><i>Earthmoving permit for wind farm</i></b>                                                                                                                                                                               | <b><i>EA, EPA</i></b>          | <b><i>Eathmoving permit</i></b>                                                                                                                                                                                                                                                          |

**Semi-annual Safeguards Monitoring Report  
Yap Renewable Energy Development Project  
July - December 2017**

|             |                                                                                                                                                                                                                                                                                                                      |  |                                                                              |                            |                                                                                                                                                                                                                                                                                                                             |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                                                                                                                                                                                                                                                                                                                      |  | <i>site work</i>                                                             |                            | <i>for all phases of the project were duly issued by EPA.</i>                                                                                                                                                                                                                                                               |
|             | 9                                                                                                                                                                                                                                                                                                                    |  | <b>Contractor's Environment Management Plan – Sedimentation Control Plan</b> | <b>Contractor, EPA, EA</b> | <p><i>The CEMP, with a sedimentation control plan, was submitted to and approved by EPA for for the wind project. EPA was lead agency monitoring compliance with the CEMP and other project requirements, with support from the EA.</i></p> <p><i>No violation was cited during project construction/implementaton.</i></p> |
| Attachments | <p><b>Monitoring checklist (based on items identified in the LARP)</b></p> <p><b>Photographs</b></p> <p>Pending submission of reports from the social and environment specialists from the design and supervision consulting firm for the project.</p> <p><b>Additional information as required</b></p> <p>None.</p> |  |                                                                              |                            |                                                                                                                                                                                                                                                                                                                             |

Victor Nabeyan  
Team Leader, PMU  
YSPSC