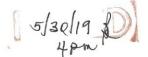


Palau Energy Administration

Ministry of Public Infrastructure, Industries & Commerce PO Box 1471

> Koror, Palau PW 96940 Office: (680) 488-1281 Fax: (680) 488-6741



30 May 2019

Tommy E. Remengesau Jr. President Republic of Palau Koror, PW 96940

RE: IPP Regulations for your Final Review

Dear President Remengesau Jr.,

On behalf of the Palau Energy Administration, we hope this letter finds you in good health and high spirits.

Please find attached to this letter the IPP regulations signed by Minister Obichang for your final review and signature following the APA process.

Please let us know if there is anything else you need and thank you for your time andz consideration for these IPP regulations.

Respectfully,

Tutii Chilton

Executive Director

Palau Energy Administration

Ministry of Public Infrastructure, Industries and Commerce

c: Charles I. Obichang, Minister of Public Infrastructure, Industries and Commerce

PNEC Chairman Nick Ngwal

File

Regulations for the Development of Renewable Energy Facilities by Independent Power Producers

Part 1: Context and Introductory Provisions

- 1. <u>Purpose</u>. These regulations are promulgated to stipulate:
 - 1.1. How the Palau Energy Administration (PEA) will review applications by the Palau Public Utilities Corporation (PPUC) to enter major business negotiations with Independent Power Producers (IPPs) for the development of renewable energy facilities.
 - 1.2. How PEA will evaluate applications by PPUC for unsolicited proposals for the development of renewable energy facilities connected to PPUC's network by IPPs.
 - 1.3. Licensing requirements applying to IPPs.
 - 1.4. The processes for soliciting renewable energy from IPPs through a formal tender procedure.
 - 1.5. How PEA will review a Power Purchase Agreement (PPA) to be signed between PPUC and an IPP.
- 2. <u>Authority</u>. The regulations are developed pursuant to RPPL 10-23 amending Chapter 4, 6 and 7 of Title 37 of the Palau National Code and pursuant to the Administraive Procedures Act as set forth in Title 6 of the Palau National Code.
- 3. <u>Severability</u>. If any section, subsection, item, clause, or phrase contained in these regulations is found to be illegal or otherwise incorrect or inapplicable, such finding shall not affect the validity of the remaining provisions of these regulations.
- 4. Definitions. The following definitions shall apply to these regulations:
 - 4.1. "Capacity Plan" means a document to be produced by PPUC and approved by PEA that specifies, based on technical and economic analysis, the amount of renewable energy, including electricity storage, that can be reasonably connected to PPUC's network.
 - 4.2. "Electricity Storage" means the capture of energy produced at one time for use at a later time by a battery or other means
 - 4.3. "Grid Connection Agreement" means a document signed by PPUC and an IPP that sets out the technical terms and conditions surrounding the operation of the renewable energy facility and its connection to PPUC's grid.
 - 4.4. "Independent Power Producer" (IPP) means a person or entity that enters a commercial agreement (Power Purchase Agreement) with PPUC for the supply of energy to the central grid.
 - 4.5. "Power Purchase Agreement" (PPA) means a commercial agreement between the IPP and PPUC that specifies a number of complimentary obligations which affect and contractually bind both the producer and the off-taker. These obligations include the terms on which PPUC will compensate the IPP for the supply of electricity to PPUC.
 - 4.6. "Renewable Energy" means energy derived from renewable sources and includes renewable energy combined with electricity storage facilities or independent electricity storage facilities.

- 4.7. "Responsible administrative body" means the organization directly administrating a solicited process, which may be PEA or PPUC.
- 4.8. "Solicited Process" means a process for commissioning renewable energy facilities or projects where PEA or PPUC issues a formal request for bids or proposals and seeks tenders, proposals or bids through a competitive process.
- 4.9. "Stakeholders" means the Palau National Energy Committee and the Leadership of Palau, including traditional leaders and elected representatives in executive and legislative branches.
- 4.10. "Unsolicited Process" means a process for commissioning renewable energy facilities or projects that starts from an applicant (IPP) approaching PPUC with a proposal for a PPA or similar arrangement to provide renewable energy connected to PPUC's grid.

Part 2: Capacity Planning

5. Development of a Capacity Plan

- 5.1. PPUC shall develop a Capacity Plan that specifies, based on technical and economic analysis, the amount of renewable energy, including electricity storage that can be reasonably connected to its distribution and transmission network through its own plants, IPPs and net metering arrangements, and the optimal approach to developing the necessary capacity.
- 5.2. The Capacity Plan should reflect a least cost approach to developing renewable energy, incorporating:
 - 5.2.1. Palau's target for renewable energy as set out in its Nationally Determined Contribution as agreed under the United Nations Framework Convention on Climate Change.
 - 5.2.2. The capability of PPUC's transmission and distribution network and associated systems to absorb additional renewable energy.
 - 5.2.3. A planning horizon of not less than 5 years.
 - 5.2.4. The optimal size, or range of sizes, for new renewable energy development considering expected technical and economic performance of relevant technologies as applied to PPUC's network.
 - 5.2.5. A need to ensure appropriate standards of reliability, adequacy and system operation.
- 5.3. PPUC will submit the Capacity Plan to PEA for approval. PEA will provide its approval or request further clarifications within 30 days.
- 5.4. The first Capacity Plan shall be submitted to PEA not later than 30 September 2019. The Plan shall be reviewed no later than 2 years following initial and subsequent approval by PEA.

6. New renewable energy projects to be consistent with the Capacity Plan

6.1. Any request for solicited or unsolicited proposals should be consistent with PPUC's Capacity Plan.

6.2. Where deviations are present, PPUC should justify to PEA why a proposed development is appropriate and provides additional benefits to customers over and above those envisaged under the Capacity Plan.

Part 3: Licensing

- 7. Requirement for an IPP to hold a generation license issued by PEA.
 - 7.1. Any IPP wishing to generate electricity for supply to PPUC through a PPA must apply in writing to PEA for a license to do so.
 - 7.2. An application by an IPP for a generation license can be made concurrently with a request by PPUC for a PPA to be approved.
 - 7.3. PEA will provide information on the details to accompany the application, which will include as a minimum, details on the financial standing and technical capabilities of the company.
 - 7.4. PEA will respond to an application for a license within 60 calendar days. Any decision to approve a license may be conditional upon signing of a PPA.
 - 7.5. No IPP wishing to sell electricity to PPUC through a PPA may do unless it has an approved license and a signed PPA.

Part 4: Solicited Process

- 8. Initiating a Solicited Process.
 - 8.1. PPUC can commence a solicited process by seeking the agreement of PEA.
 - 8.2. In its request PPUC shall provide details of:
 - 8.2.1. The proposed capacity to be acquired through the process.
 - 8.2.2. The applicable renewable energy technologies.
 - 8.2.3. How the requirements of the Capacity Plan are best met through a solicited proposal.
 - 8.2.4. The proposed format of any auction, proposal or similar arrangement, and underpinning procedures to solicit and evaluate bids.
 - 8.3. PEA will advise stakeholders of PPUC's request and its subsequent response to PPUC.
 - 8.4. PEA can also commence a solicited process on its own initiative.
- 9. Organization responsible for administering the solicited process
 - 9.1. The solicited process will be administered by PEA or PPUC ("responsible administrative body").
 - 9.2. The responsible administrative body may be supported by an international development agency.
 - 9.3. Where PPUC is the responsible administrative body, its actions will be subject to oversight from PEA.

10. Administering a Solicited Process

- 10.1. Prior to initiating a solicited process, the responsible administrative body will develop and publish all necessary legal instruments, tender documents and other information to assist participants and ensure a transparent process.
- 10.2. All tender documents will at a minimum be compliant with best international procurement practices.
- 10.3. All necessary documentation will be consistent with the key processes outlined in the subsequent sub-section.

11. Process for a Solicited Process

- 11.1. When initiating a Solicited Process, the responsible administrative body will, with the support of relevant Government Ministries, at a minimum:
 - 11.1.1. Publish a timeline for the Solicited Process, which will be binding and provide sufficient time for interested parties to complete each step of the process.
 - 11.1.2. Develop a communication strategy, including the creation or selection of a specific website where the project documents and information will be published, and
 - 11.1.3. Publish a comprehensive set of supporting documents.
- 11.2. The set of supporting documents shall include, but not be limited to:
 - 11.2.1. A draft PPA, focusing on technology specific components and encompassing necessary regulatory and compliance requirements.
 - 11.2.2. A draft Grid Connection Agreement and draft offtake agreements.
 - 11.2.3. Details of land use agreements, if applicable.
 - 11.2.4. Details of Licensing requirements.
- 11.3. The request for a solicited proposal will:
 - 11.3.1. Specify the technology being procured.
 - 11.3.2. Specify the limit on the total size of capacity being procured.
 - 11.3.3. Define the project scope, including how the plant(s) will be integrated into PPUC's network covering connection, dispatch and balancing.
 - 11.3.4. Specify whether the procurement is location specific, whether respondents are to find their own land, and the availability of state (leased) land.
 - 11.3.5. Set out dispute resolution provisions.
 - 11.3.6. Identify any available incentives, if known.
- 11.4. Where the solicited process is run by PPUC, PPUC will provide all information to PEA as requested to ensure compliance with the above steps.

12. Approval of PPA under a solicited process

- 12.1. Any PPA arising from a solicited process will be subject to approval by PEA.
- 12.2. In its evaluation of the PPA, PEA will consider the following factors at a minimum:
 - 12.2.1. Compliance with all permit and documentation requirements.
 - 12.2.2. Compliance of the Grid Connection Agreement against requirements set out in corresponding regulations.

- 12.2.3. The degree of competition in the solicited process, and whether this warrants a subsequent cost-based evaluation of the proposed PPA price path.
- 12.2.4. An evaluation of the proposed PPA tariffs against current tariffs and the current cost of supply.
- 12.3. PEA may request additional information from PPUC, and/or consult with stakeholders prior to taking a decision on whether to approve to PPA.
- 12.4. The approval of a PPA may also require compliance with additional conditions subsequently imposed on IPPs.

13. Communication of a decision on a PPA developed under a solicited process

- 13.1. PEA will provide its decision to approve or disapprove a PPA arising from a solicited process to PPUC within 60 calendar days after all required information is received from PPUC.
- 13.2. Where a PPA is approved, PEA will inform relevant stakeholders, including Government.
- 13.3. In the case of non-approval of the PPA, PEA will provide its reasons in writing to PPUC.

Part 5: Unsolicited Process – Approval to enter major business negotiations

- 14. <u>Approval to enter major business negotiations</u>. To enter negotiations for a PPA through an unsolicited process PPUC will:
 - 14.1. Request in writing to PEA its desire to enter negotiations with an IPP or other party for a PPA for renewable energy.
 - 14.2. Provide, at a minimum, the following information:
 - Details of the technology, capacity and draft specifications of the proposed project.
 - 14.2.2. Preliminary information on the financial standing of the project proponent(s).
 - 14.2.3. Supporting justification from PPUC's Capacity Plan highlighting how the potential project could provide necessary capacity over the planning period.
- 15. Review of request to enter negotiations. Upon receiving a request from PPUC to enter negotiations, PEA will:
 - 15.1. Seek any necessary clarifications from PPUC
 - 15.2. Consult with relevant stakeholders as appropriate.
- 16. <u>Process of granting approval.</u> PEA will grant approval for PPUC to enter negotiations if it is satisfied that:
 - 16.1. Based on the information provided, the project may result in a cost-effective way of commissioning new capacity, consistent with PPUC's Capacity plan.
 - 16.2. The project is to be developed using a renewable energy technology.
 - 16.3. The applicant has an adequate financial standing and technical capability to develop the proposed facility.

17. Approval timeframe

- 17.1. PEA will approve or disapprove a request to enter negotiations to PPUC within 30 calendar days, after all required information is received from PPUC.
- 17.2. Once PEA has provided approval to enter negotiations it will inform relevant stakeholders.

18. Non-binding nature of approval.

- 18.1. Approval for PPUC to enter negotiations with an IPP or similar party does not provide any guarantee that any resulting contract and other documentation arising from the negotiations will be subsequently approved.
- 18.2. Entering negotiations with an IPP does not preclude PPUC or PEA from initiating a Solicited Process for the capacity in question.

Part 6: Unsolicited Process - Approval of a Power Purchase Agreement

- 19. Application process for approval of projects arising from unsolicited proposals
 - 19.1. PPUC shall provide a written application to PEA to approve a draft PPA with an IPP.
 - 19.2. In its application, PPUC shall provide the following information:
 - 19.2.1. A copy of the draft PPA.
 - 19.2.2. Detailed specifications of the proposed project.
 - 19.2.3. Details of grid studies undertaken by the applicant and/or PPUC.
 - 19.2.4. Details of the land use arrangements.
 - 19.2.5. A draft Grid Connection Agreement.
 - 19.2.6. Any provisions that will require Government approval or support.
 - 19.2.7. Copy of PPUC's financial evaluation of the applicant.
 - 19.2.8. Details of required environmental compliance, and where this is outstanding, a letter of commitment from the project proponent to meet all applicable requirements under Palauan law, as a condition precedent of the PPA.
- 20. <u>Evaluation of the application</u>. PEA will evaluate the application for approval of a project arising from an unsolicited proposal by considering at a minimum the following issues:
 - 20.1. Compliance with all permit and documentation requirements.
 - 20.2. Evaluation of the Grid Connection Agreement against requirements set out in corresponding regulations.
 - 20.3. A cost-based evaluation of the proposed PPA price path.
 - 20.4. Benchmarking against similar projects.
 - 20.5. An evaluation of the proposed PPA tariffs against current tariffs and the current cost of supply.

21. Levelised cost of energy.

- 21.1. The proposed PPA price path will be evaluated against the levelised cost of energy (LCOE) in Palau for the technology or technologies (e.g., including electricity storage) in question.
- 21.2. Factors that may be considered in estimating the levelised cost of energy in Palau include:
 - 21.2.1. Investment costs of the plant, including the costs of feasibility studies,
 - 21.2.2. Site development costs,
 - 21.2.3. Construction costs, including the costs to import equipment,
 - 21.2.4. The costs of connecting to the transmission or distribution system including lines, substations and associated equipment.
 - 21.2.5. Operation and maintenance expenditure.
 - 21.2.6. Fuel costs (where applicable).
 - 21.2.7. The annual and cumulative output of the facility, adjusted for any degradation over time.
 - 21.2.8. Financing costs (including interest during construction) and a fair return on the invested capital. The availability of concessionary finance will be considered when estimating such costs.
 - 21.2.9. The expected lifetime of the plant and the appropriate time limit for the PPA.
- 21.3. In the case of divergence between the estimated LCOE and the proposed PPA price, PEA will need to be satisfied there is a reasonable explanation before proceeding further.
- 22. <u>Evaluation against current tariffs.</u> An evaluation of the proposed PPA prices against current energy-related charges will be undertaken and consider:
 - 22.1. The immediate impact of the project on customer tariffs.
 - 22.2. The likely impact of the project on the customer tariffs over time against the scenario of no-project.
- 23. <u>PEA to seek third-party advice.</u> PEA will seek independent advice and consult stakeholders as appropriate on the compliance of the PPA against these regulations.
- 24. Communication of a decision on a PPA developed under an unsolicited process
 - 24.1. PEA will provide its decision to approve or disapprove the PPA to PPUC within 90 calendar days after all required information is received from PPUC.
 - 24.2. Where a PPA is approved, PEA will inform relevant stakeholders, including Government.
 - 24.3. In the case of non-approval of the PPA, PEA will provide its reasons in writing to PPUC.

Part 7: Miscellaneous

- 25. Unit of currency. All PPAs shall be denominated in US dollars.
- 26. <u>Incorporation of additional requirements.</u> The approval of a PPA may also require compliance with additional conditions subsequently imposed on IPPs.
- 27. Other issues. All IPPs shall comply with all relevant tax laws of the Republic of Palau, unless stated otherwise.
- 28. Effective Date. These regulations shall take effect immediately.

Adopted by the Ministry of Public Infrastructure, Industries & Commerce on this 35th day of May, 2019.

The Monorable Charles I. Obionang

Minister of Public Infrastructure, Industries & Commerce

The Honorable Tommy E. Remengesau, Jr.

President of the Republic of Palau

Date/