



Commonwealth Utilities Corporation



REQUEST FOR PROPOSALS

CUC – RFP 07 - 015

Grid Supply Renewable Energy Generation Projects for CNMI

COMMONWEALTH UTILITIES CORPORATION
REQUEST FOR PROPOSALS CUC – RFP 07 - 015
GRID SUPPLY RENEWABLE ENERGY GENERATION PROJECTS for CNMI

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1.0 GENERAL PROGRAM INFORMATION

These General Conditions shall have effect, subject to any express stipulation or condition at variance with these conditions that may be contained in the specification or may otherwise be incorporated in the contract.

1.1 PROGRAM SUMMARY: REQUEST FOR PROPOSAL ANNOUNCEMENT

The Commonwealth Utilities Corporation (CUC) seeks the development of Grid Supply Renewable Electricity Generation (“REG”) projects for the Commonwealth of Northern Mariana Islands (CNMI) and intends to enter into long-term performance contracts, where the contractors will be fully responsible for construction and operation of these Renewable Electricity Generation (“REG”) projects. This Request For Proposal (RFP) is the first in what the CUC envisions to be an ongoing process of growth and development of a comprehensive portfolio of increased energy efficiency in the CNMI islands, to reduce the islands’ dependence on fossil fuel/s.

CUC is the government-owned electric, water and wastewater utility. CUC believes that market conditions offer highly attractive opportunities for renewable power suppliers in the CNMI, while at the same time providing our consumers with energy from alternative sources at reduced power rates.

CUC is soliciting competitive proposals from interested parties (proposers) to provide for all costs, material, labor and equipment for the Design, Supply, Installation, Commissioning, Operation and Ownership of REG facilities in the islands of Saipan, Rota and Tinian, including associated interconnection facilities to interface with CUC power grid.

CUC believes that the following technologies are technically and financially feasible for REG projects, with sufficient output sold either individually or “packaged” together:

Solar photovoltaic, wind energy, wave or tidal energy. Other technologies that may be useful to consider are, fuel cells, solar thermal power, geothermal power and methane gas-fired generation from landfills or a biomass facility. However the proposers are responsible to choose the most effective and appropriate technologies for their application based on their assessment.

CNMI has one of the highest power tariff rates in the nation. This averaged from US \$ 0.244 to \$0.319 per kWh sold, for the majority of consumers, with the fuel component rate of \$0.228 cents per kWh in September 2007. CUC, intends to guarantee for a period of years the purchase of the REG-produced power at a negotiated rate from the most competitive offerors. CUC may select more than one proposer. CUC is hoping to achieve full compliance of the CNMI Public Law 15 – 23 for Renewable Energy in CNMI through this RFP process. The RFP documents shall be available for review and download at <http://www.cuccnmi.com/> where it has been posted to enable a wider participation. CUC does not intend to distribute hard copies for this RFP.

The schedule for this RFP is as below:

- “Expression of interest” shall be received from the proposers, no later than 3:00 p.m., local time, on 11 January, 2008.
- A pre-proposal conference, if deemed necessary by CUC, will be held on January 26, 2008, however attendance is preferred but not mandatory, since most of the manufacturers of REG equipment are located outside of CNMI.
- All questions shall be in writing to the same address or via e-mail to rfpinfo@cuccnmi.com no later than 3:00 p.m. local time, on January 31, 2008. Late questions, submittals or proposals will not be considered, in the interest of fairness to all proposers.

- Proposals shall be marked CUC – RFP 07- 015, one (1) original and seven (7) copies submitted in a sealed envelope to Acting Manager, CUC Procurement Division, 3rd Floor, Joeten Dandan Building P.O. Box 501220, Saipan, MP 96950, Tel. 1 (670) 235 7025 – 7032 and Fax. 1 (670) 235 5138, no later than 3:00 p.m., local time, on February 25, 2008.

Discussion may be conducted with responsible proposers, who submit proposals determined to be reasonably susceptible to being selected for award, for the purpose of clarification and to insure full understanding of, and responsiveness to, solicitation requirements. Proposers shall be accorded fair and equal treatment with respect to any opportunity discussion and revision of proposals and such revisions may be permitted after submission and prior to award for the purpose of obtaining the best and final offers. In conducting discussion, there shall be no disclosure of any information derived from proposals submitted by competing proposers. CUC will evaluate the offers based on price and the likelihood of the offeror's being able to deliver the power (a combination of technical and financial capability), under applicable procurement regulations.

Proposals that provide the maximum installed capacity and energy for integrating into the grid are preferred, but other criteria will also be considered to encourage a diversity of technologies and environmental benefits that also maximize the potential savings for CUC and the community. CUC is expected to award the contract to successful proposals which will conclude in completed projects on a ¢/Kwh generated, or some other quantifiable measure for a maximum period of 20 years.

This RFP does not commit CUC to award a contract, pay any costs incurred by a proposer in preparing a proposal, to procure or to contract for services. CUC reserves the right to reject any and all proposals pursuant to CUC's Procurement Regulations or may cancel the RFP if to do so would be in the best interests of CUC. All proposals shall become the property of CUC.

1.2 PURPOSE AND INTENT

To provide a competitive mixed portfolio of the power grid in CNMI, which at present is 100% produced from Diesel fuel oil (LSADO No. 2). Grid supply projects are those that supply electricity to the CUC power grid and distributed to the CUC consumers, as opposed to those designed to meet individual customer needs.

Currently some renewable energy technologies are less able to compete on the basis of cost than others because they may yet be emerging technologies. To ensure a speedy and practical action program and for the successful implementation of this RFP, contractors are advised to propose technologies which have been proven successful elsewhere in the world. Proposals will be reviewed with its cost per unit of delivered energy and other attributes such as the project's relative environmental impact in these areas, as well as its expected life span, economic cost, viability and production capacity etc. as detailed in the RFP documents.

Successful REG projects that are accepted by the surrounding community are very important to the future of renewable energy in CNMI. For this reason, CUC is seeking proposals that include plans to address community concerns by minimizing negative environmental impacts and including appropriate involvement of the local community. Reliable long-term operation is also very important. The proposers shall be free to choose the most effective technology for the application. Operation and Maintenance plans should be adaptable to the local conditions and proposals should consider the geographic and climatic conditions in order to ensure reliable and long term operation.

1.3 BACKGROUND

The Commonwealth Utilities Corporation (CUC) is the government utility and sole community provider of electric power to the general business and residents of the Commonwealth of Northern Mariana Islands (CNMI), a Commonwealth of US. In addition to power generation and distribution, CUC also has the responsibility of managing the water and wastewater systems in CNMI. These islands became a US commonwealth territory in 1976. Major federal funding for infrastructure development and capital improvement projects are arranged through the local branch of US Dept. of Interior (DOI). Unlike Hawaii or Guam, the CNMI currently has its own control of immigration and labor laws.

CUC is dependent on Diesel fuel oil for their power. The engines are old (20+ years) and inefficient and tend to consume more fuel and lube oil due, in part, to lapses in their operation and maintenance. The current trends in the fossil fuel costs of diesel oil, which is the primary fuel for all the operating power plants of CUC, has created a huge financial crisis and seriously hampered the utility and the CNMI governmental operations.

The installed capacity in Saipan was 110 MW, however the current available capacity is only averaging about 48MW where the peak load demand has been recorded between 45MW and 50 MW, leaving no reserve for many of the needed maintenance programs. The highest peak was recorded in 2002 at 72MW, however the capacity and plant output gradually reduced over the years, to the present level. The installed capacity in Rota is 6.5 MW and Tinian is 20 MW with their peak load demand of 2.5 MW and 6.0 MW respectively. In spite of the installed capacity at the CUC Rota power plant, the condition of the generating units are in poor condition, with a result that, CUC has to resort to buying power from outside sources to maintain its power grid. CUC has entered into a contract with a private company to supply power on an as needed basis.

With a view of improving its resource base, CUC is interested in the development of grid supply renewable electricity generation (“REG”) projects for the islands of Saipan, Rota and Tinian in the Commonwealth of Northern Mariana Islands (CNMI). CUC is inviting proposals for ushering in the renewable energy supply from contractors, Independent Power Producers (IPPs) or private investors, leaving the choice of technology to the proposers.

CUC is seeking Power Purchase Agreements (PPAs) with a delivery term of maximum 20 years beginning in 2007 or later. CUC does not intend to specify any limitations on the REG types it will entertain. It will accept proposals for projects in its service territories, of Saipan, Rota and Tinian though it would like to start with Saipan which has experienced load shedding and acute shortage of reserve power. The energy delivery requirement is immediate and the reliability and sustainability of service for the duration of the contract period is of paramount importance, leaving the choice of technology to the proposers.

The types of proposals that CUC will consider are “turnkey” proposals, in which the contractor is fully responsible for assessment, permitting, construction and sale of the renewable energy power to CUC for a pre-determined price, during the term of the contract.

1.4 KEY EVENTS:

Anticipated schedule of proposal and contract award is as below:

0. RFP ANNOUNCEMENT - Start Date	6-Dec -07
1. EXPRESSION OF INTEREST BY PROPOSERS	11-Jan-08
2. QUESTIONS/CLARIFICATIONS FROM POTENTIAL CONTRACTORS	31-Jan-08
3. PREPROPOSAL CONFERENCE (only if required)	26-Jan-08
4. FINAL RESPONSE TO ALL QUESTIONS/CLARIFICATIONS BY CUC	08-Feb-08
5. PROPOSAL SUBMISSION BY PROPOSERS	25-Feb-08
6. PROPOSAL EVALUATION BY CUC	04-April-08
7. NEGOTIATION WITH SHORTLISTED CONTRACTORS	05-May-08
8. CONTRACT AWARD /NOTICE TO PROCEED	13-Jun-08

2.0 DEFINITIONS AND SCOPE OF WORK

2.1 DEFINITIONS

In this contract, the following terms shall be interpreted as indicated: -

- 2. 1.1 "Utility" or "Purchaser" means the Commonwealth Utilities Corporation (CUC).
- 2. 1.2 "Contract" means the agreement entered between the Utility and the Contractor as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 2. 1.3 "Contract Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.
- 2. 1.4 "Goods" means all the equipment, which the Contractor is required to complete the REG projects and to supply power to the CUC under the Contract.
- 2. 1.5 "Contractor", "Proposer" or "IPP" means the individual or firm carrying out works as defined under Scope of Works.
- 2. 1.6 "Site" means the place where the equipment will be installed, as stated in the Schedules.
- 2.1.7 "Engineer" means the Engineer appointed by the Executive Director of CUC or his representative authorised in writing by him.
- 2.1.8 "Renewable Energy" for the limited purpose of this Solicitation means electrical energy produced by wind , solar energy, hydropower, landfill gas, waste to energy, geothermal resources, ocean thermal energy conversion, ocean wave or current energy, biomass, including municipal solid waste, bio fuels or fuels derived from organic sources (other than coal, oil or gas) hydrogen fuels derived from renewable energy , or fuel cells where the fuel is derived from renewable sources.(or any other technology not listed here, but as defined in the US Energy Policy Act 2005, Public law 109 –58 and CNMI Public Law 15 – 23 as amended).

2.2 SCOPE OF WORK

Contractor is responsible for developing and commissioning of REG projects in coordination with CUC, complete with associated interconnection facilities to the existing CUC power grid. Contractor shall operate the facility and sell the power to CUC during the contract period.

The contractor is encouraged to ensure that they have familiarized and have satisfied themselves with the prevailing conditions at the available sites or the potential sites which they plan to install the RE projects and that all such conditions have been taken into account to integrate fully with the existing CUC facility, equipment and programs without causing any operational disruptions thereto, in performance of the contract.

Contractor must note the following:

- a. No feasibility studies, or location research have been carried out by CUC or will be funded through this solicitation.
- b. Projects encompassing multi-year completion schedules will be entertained, but rapid development and commissioning of projects is a primary aim.
- c. Proposing teams should include members who have renewable energy plant development and operational experience.
- d. Proposers must demonstrate that they have financial resources to perform the proposed work, appropriate technical expertise, access to adequate facilities or the ability to get them, and a good performance record; and be qualified for an award under applicable laws, including CUC's procurement regulations.
- e. Proposers shall demonstrate that they are able to provide the most competitive RE project/s in a timely manner.

2.3. DESIGN REQUIREMENTS

The work performed and equipment offered to this specification shall have a proven track record of satisfactory service in applications under site conditions, similar or more severe than those specified herein. Evidence of such record shall be submitted with the proposal. Contractor shall provide such information as required in their proposal for CUC to carry out adequate verification of the past operational records. System Frequency of the project shall be between 59.5 Hz and 60.5 Hz (nominal / 60Hz) and Voltage between $\pm 5\%$ on the 13.8 kV delivery point.

The specification provided in the proposal document is for guidance, and the contractor is allowed to improve on such conditions and indicate in the proposal documents of the intent of such deviations and establish that the products provided are equal to or better than what is mentioned in the proposal document depending on the technology proposed.

The structural installations for the projects are required to follow the CNMI Department Public Works building code regulations. Contractor shall obtain the necessary permits and approvals. As CUC expects that any new generation will be hooking up to the CUC grid supply, preferably at 13.8KV level, the details of the CNMI Power Transmission and Distribution System is provided below:

Power Transmission Distribution System (PT & DS)

CUC's power transmission and distribution system was established, operated and maintained by the US Government during the Trust Territory period. Upon the transfer of the Islands to the Commonwealth Government, title transferred to the CNMI Department Public Works and then CUC, which has operated and maintained the system since, with the exception of Tinian, where the system is currently operated and maintained by an IPP, which has a long term contract signed with CUC.

Saipan Power Transmission and Distribution System

The PT&DS takes power from Power Plants 1 and 2 at a voltage of 13.8 kV through feeder lines T1 and T2 to a substation located near the plants, which steps up voltage to 34.5 kV. The underground cables, Line 1 and Line 2, with a length of seven miles, each feed the Kiya Substation (35.5/13.8 kV), with its feeders K1, K2, K3 (spare) and K4 at 13.8 kV. Feeders 1, 2, 4 and 7 also emanate from Power Plants 1 & 2. Feeders 1 and 3 take power from both Power Plant No. 1 and No. 4.

The Lower Base Substation, located at the perimeter of Power Plant 1, has a capacity of 100 MVA. Two units of 50-MVA transformers step up the 13.8 kV incoming voltage to 34.5 kV. A metal-clad switchgear is housed in a control building. It has six cubicles, two of which are utilized for the incoming power circuit breakers, another two are used as 34.5 kV control panel, the fifth one is for the bus tie breaker and the last is for the station service transformer.

Power Distribution Description of Tinian Island

Tinian's power plant offers 20 MW Capacity, and 13.8 kV, 3 phase-4 wires. There are four feeders supplying the community, its commercial establishments and the Voice of America (VOA, also known as International Broadcasting Bureau -IBB) broadcast facility. VOA is a very large demand customer.

Feeder 1 supplies the western side of the Island (West Field). Feeder 2 serves the central district of Tinian to the Kastiyu area. Feeder 3 serves the eastern side of Tinian. Feeder 4 serves the Voice of America, on the Island's northwest.

There are 120 distribution transformers installed, of different rated capacities, with approx. 2.07 circuit miles of 13.8 kV primary lines installed and commissioned for the whole system.

Power Distribution Description of Rota Island

Rota island is the smallest of the three islands, with a total installed capacity of 6.5 MW. The two generators in the CUC Rota Power plant are rated 4,160 volts and are directly connected to the 4.16 kV distribution bus, which feeds the two feeders (Feeders 1 and 2), and one 5000 kVA step-up transformer to boost the voltage to 13.8 kV.

Rota has three (3) power feeders supplying electricity to the island. Feeder 1 serves the area of west and east harbor, the shortest circuit of backbone lines rated at 4160 volts, Feeder 2 serves Songsong area. Feeder 3 is the longest circuit of 13.8 kV lines, with an approximate length of 6.71 miles. It serves the areas of Sinapalo, Ichenchon and Ginalangan.

2.4 REFERENCE CONDITIONS

Located just north of Guam, the CNMI is a three-hundred mile archipelago consisting of 14 islands, with a total land area of 183.5 square miles. The principal inhabited islands are Saipan, Rota and Tinian. The northern, largely uninhabited islands are Farallon de Medinilla, Anatahan, Sariguan, Gudgeon, Alamagan, Pagan, Agrihan, Asuncion, Maug Islands, and Farallon de Pajaro. Saipan is 3,300 miles from Honolulu; 5,625 from San Francisco; 1,272 miles from Tokyo; and 3,090 miles from Sydney.

The Mariana Islands are on the edge of the Philippine Plate. They were formed by underwater volcanoes along the Marianas Trench. The northern islands are high volcanic islands and the southern islands are raised limestone.

Saipan is the principal island and commercial center of the Northern Mariana Islands. It is about 12.5 miles long and 5.5 miles wide and has a total land area of 46.5 square miles which is about the size of San Francisco.

Mt. Tapotchau at 1,554 feet is the highest point. Saipan's 54 mile coast line is irregular except on the western side where there is a fringing reef. A large part of the island is public land. Saipan has 14 miles of beach. Of the 8 communities on Saipan, Garapan and Chalan Kanoa may be considered the principal urbanized areas.

Saipan is 120 miles north of the United States Territory of Guam.

Location: Oceania, islands in the North Pacific Ocean, about three-quarters of the way from Hawaii to the Philippines.

Geographic coordinates: 15 12 N, 145 45 E

A typical yearly weather data recorded at Guam airport:

Weather	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
Avg Fahrenheit	76	77	78	79	79	80	80	80	79	80	80	79
Avg Centigrade	24	25	26	26	26	27	27	27	26	27	27	26
Rainfall inches	5.2	4.3	3	4	4.5	5.2	9.6	12	14	14	8.5	5.9
Rel humidity %	77	76	75	74	73	76	76	81	81	80	80	78
Sunshine hrs/day	11	11	12	12	12	13	13	12	12	12	11	11

The data for Guam may be assumed as a general guide for the CNMI islands for which this RFP is being solicited.

Refer to location map, Power Distribution Schematic and Geographical line and other national web pages and geographic reference sites and diagrams for additional details.

The following is the list of CUC power consumer base as recorded on December 31, 2006

ISLAND	COMMERCIAL	RESIDENTIAL	GOVERNMENT	TOTAL
ROTA	189	711	77	977
SAIPAN	3,033	10,464	643	14,140
TINIAN	140	748	105	993
TOTAL	3,362	11,923	825	16,110

3.0 PROPOSAL SUBMITTAL

3.1 PROPOSAL INSTRUCTIONS:

Proposals must be submitted to the address and by the due date specified in this RFP. Proposals that are received by the CUC Procurement and Supply Division by the due date will be logged in and time-stamped. Proposals not received by the CUC Procurement and Supply Division by the due date specified in the applicable solicitation shall be rejected. In the interest of fairness to all proposers, no exceptions will be granted.

Every proposal must include the required information. Proposals that do not include the required information will be disqualified.

Further description of these information items is provided in the subsections below.

Prospective proposers may submit multiple proposals for different projects. The successful proposer(s) will be responsible for all aspects of the REG projects: financing, development, installation, testing/commissioning, operation, power sales, plant ownership, expansion of facility and decommissioning.

The proposal shall also include :

Eight(8) copies (1 original + 7 copies) of containing the following information:

- a. Complete data requested in the "Proposal Submittal" Instructions
- b. Building/site layout – If applicable
- c. Specification details of Equipment for each site/location proposed.
- d. Payment plans and guarantees
- e. Interconnection data and requirements provided by the contractor and which are required to be provided by CUC (if any).

3.2 PROPOSAL PREPARATION

3.2.1 PROJECT SUMMARY

Provide details of the project, include proposed status of

- a. Project development
- b. Equipment proposed and specification including type and technology used
- c. Size of project (Megawatts)
- d. Proposed location and site description
- e. Anticipated schedule required to attain regular operation and capacity intended to be supplied as response to this RFP.

3.2.2 PROJECT DESCRIPTION

Please include the following information, if available:

- a. **Environmental study**: Details of environmental study required and / or completed to develop this project.
- b. **Site Location and Description** – Indicate the possible area or areas for project development and the basis for site selection. If a specific site has been selected, include a map with the location of the site clearly marked. Specify whether the project is located at one site, or divided among several sites.
- c. **Possible Environmental Impacts and Benefits** – For each site proposed, and the proposed renewable energy technology, discuss known environmental impacts.

The REG project/s may require compliance with the regulatory agencies, such as Division of Environmental Quality (DEQ), Department of Fish and Wild Life (DFW), Coastal Resources Management (CRM) and US Environmental Protection Agency (EPA) standards as appropriate. The following resources are provided for guidance and information of the proposers:

Division of Environmental Quality (DEQ) - web page can be accessed at - <http://www.deq.gov.mp/>

Coastal Resource Management (CRM) - web page can be accessed at - <http://www.crm.gov.mp/>

Division of Fish and Wild Life (DFW) - web page can be accessed at - <http://www.dfw.gov.mp/>

Division of Historic Preservation Office (HPO) - web page can be accessed at – <http://www.cnmihpo.com/>

US Environmental Protection Agency (EPA) - web page can be accessed at - <http://www.epa.gov/>

Contractor is responsible for verifying with the applicable agencies and ensuring the necessary compliance.

- d. **Design** – The contractor will choose the most appropriate design based on their assessment to ensure reliable supply of power to CUC after completion of the project. Proposers should include the details that they have chosen for the REG project.
- e. **Permits** – For each proposed area, identify permits required to build and operate the project.
- f. **Schedule** – For each REG project, identify the expected duration of assessment, permitting, design, construction, installation and commissioning phases.
- g. **Electric Interconnection** – For each project area, discuss issues associated with electrical interconnection, including the distance between the project and a suitable point to interconnect with the electrical grid. Identify new equipment to be installed and

upgrades to existing equipment required by the IPP and /or CUC.

- h. **Data** – For each project area, describe the possible renewable resource characteristics applicable to the technology and the site of the project. Sample models are as below: (Expected case scenarios suggested, without limiting to the technologies noted here)

(i) Wind:

- Expected average monthly wind speed at turbine hub height
- Average wind shear and turbulence intensity
- Annual wind speed frequency distribution (0.5 m/s bins)
- Seasonal variations and annual wind rose
- Estimated outputs of electricity.

(ii) Photovoltaics:

- Average monthly insolation on the proposed plane of installation.
- Provide the azimuth angle at which the array will be installed, the tilt angle and the type of tracking whether fixed, one axis or two axis.
- State which measuring data site you have used for your estimate. Provide details of data source and attachments used.
- Estimated outputs of electricity.

(iii) Solar Thermal:

- Type of arrangement – solar parabolic trough, dish sterling engine etc..
- Steam turbine and generation data.
- Average monthly insolation on the proposed plane of installation.
- Back up arrangement and thermal storage in hours.
- Type of control and arrangement for tracking sun.
- Estimated outputs of electricity.

(iv) Landfill :

- The source of fuel
- Characterization of fuel source by percent of methane or alternate available sources
- Amount and type of contaminants
- Type of cleanup that will be required to utilize gas
- Average monthly production of methane gas from the intended site, seasonal variation
- Combustion technology and estimated outputs in electricity
- Details of steam and emissions.
- Estimated outputs of electricity.

(v) Biomass: (which are/could be sustainably grown and harvested)

- Source of biomass

- Documentation that biomass can be cultivated and harvested in a sustainable manner, locally
- Method of utilizing biomass to produce electricity
- Reuse of byproducts such as ash and residues
- Amount of residues and byproducts to be used or reused
- Amount of methane or other fuel recapture beyond that which is required by existing federal and state rules, type of equipment to be used to reduce emissions.
- Estimated outputs of electricity.

The above is only a sample template and the contractor shall use the most appropriate detailed description of the technology intended for the project which could provide above or similar data, as a minimum.

k. Equipment Selection and proposed:

The equipment submitted by the contractor should indicate the reference /adherence to current and acceptable US / European standards or International Standards.

L. Energy Production and Plant Capacity:

- Indicate the expected nameplate capacity for the plant /s and total installation for the island of Saipan, Rota and Tinian.
- The anticipated number of units for the selected technology or for each proposed technology, location wise.
- Indicate the potential total nameplate capacity that could be developed on the site, if known.

Based on a proposed technology, estimate the net yearly energy output for the plant, accounting for losses and availability and include any assumptions that are the basis for the estimate. Provide a detailed calculation with the assumptions made.

3.3 POST-AWARD CHANGES IN PROPOSED PROJECT

CUC anticipates that projects are expected to go from award to completion unaltered from their original proposal.

The projects are expected to be designed and proposed as feasible and permitted by the local and regulatory authorities. CUC however, recognizes that some project changes may be required due to permitting requirements or events that are unforeseen by both the parties. CUC also realizes that innovation and changes in renewable technology is a trend anticipated to continue for the next few decades. Project changes due to such acts of innovation and improvement in efficiency shall be welcome, during the period of construction, operation and further expansion of the renewable energy load base. CUC must be notified in advance in writing of any proposed change in a winning project as soon the contractor is aware of such information. CUC shall inform the contractor of any changes required as soon as they are aware of it. Changes that have no material bearing upon the purposes or process of the project shall be accepted and notification issued indicating that the proposed change will not affect the project's award.

Changes which might have a negative material bearing upon the purposes or process of the project may, upon determination by CUC, result in cancellation of the winning proposal. CUC then shall seek other contractors to adequately cover the deficiencies or shortfalls so created.

3.4 Financial Information

- a. Energy Charge per kWh of Energy supplied from available Generating facility beginning with the first eligible month of generation from the project or the authorization of award to the project, whichever is later. (\$_____/kWh).
- b. Provide financial details pertaining to the proposer, joint venture or consortium. Describe the investment planned and anticipated cash flow for the contract period from selling or using renewable power produced from the plant.

3.5 PROJECT TEAM

(i) **Organizational Chart** – Prepare an organizational chart listing all team members, including the project manager, renewable energy experts and any subcontractors and other sponsors or partners involved in the project, showing their roles and responsibilities. Such organization chart shall be separate for the construction phase and normal operation phases.

(ii) **Qualifications** – State the contractor’s individual and combined expertise that would enable successful completion of this project.

(iii) **Previous REG Development Experience** – Describe the contractor’s experience in developing and operating renewable energy power production facilities, marketing power, and other relevant areas. List related projects that have been undertaken and successfully completed by the contractor and/or subcontractors. For each project, provide a brief project summary and the name and phone number of a client contact. CUC reserves the right to contact anyone so listed.

3.6 DECOMMISSIONING PLAN – CUC would like to ensure that the plant continue to operate beyond the project term. However the contractor should also look at the feasibility and address the issue of decommissioning of the Renewable Energy Projects in the proposal, to ensure that the future of renewable grid supply could be maintained as competitive and efficient as possible. This would enable the contractor to replace/changing the technology used in order to provide better returns for their investment. This shall also ensure that the project locations and environment in CNMI is not marred by inoperable and abandoned plants.

3.7 STATEMENT OF WORK – The Statement of Work is the primary contractual document that outlines work activities for the start of the project up to and reaching the normal production performance and efficiency.

The Statement of Work must be structured as an ordered set of tasks and attachments as follows:

- a. Introduction - Briefly and clearly state the overall technical goals of the project.

b. Task 1: Project Management and Coordination

Indicate how the project activities will be coordinated between the contractor, their partners, any subcontractors and CUC. A discussion of subcontracting arrangements planned may also be included.

c. Task 2: Reporting

The Contractor shall submit reports by the 10th of the month following the reporting period, summarizing the progress achieved.

Quarterly reports of the above shall summarize progress, difficulties, and planned solutions associated with developing and installing the plant.

Testing and commissioning reports – Provide detailed testing and commissioning reports which confirms beyond reasonable doubt that the equipment or a group of equipment forming a single system is able to provide the operational parameters as per the contractor's warranties.

After construction and acceptance of the Renewable Energy Projects by CUC, monthly reports shall summarize the power generation project's performance and identify all operational problems and actions taken to fix the problem, in addition to the billing statements and invoices.

3.8 RATES, CHARGES AND BILLING

All projects are expected to come on-line by the date specified in the contractor's proposal. Any project failing to come on-line by this date may have its award reduced or terminated by CUC. CUC shall also look at the option of bringing in other contractors to complete the project or awarding similar projects, to fulfill its obligation of renewable energy program and schedule. Delays for situations beyond the control of the contractor shall be exempt from any action by CUC as long such delays are mutually acceptable to both parties.

(i) Rates, Charges:

- a. Contractor shall propose all charges payable by CUC under this contract.
- b. Energy Charge per kWh of Energy supplied from the facility to CUC, at the delivery point.

(ii) Billing:

Payments are made upon approved invoices.

Completed and normal production Renewable Energy Projects must submit monthly invoices identifying the amount of eligible power generated from the facility with a written statement confirming the project's eligible power generation for the billing month. The invoice must account for the previous calendar month and submitted within the first ten (10) calendar days to the designated address. CUC has a net 30 days payment policy due to its billing cycles.

3.9 FAILURE TO SUPPLY

If a Renewable Energy Project consistently generates less than estimated in its proposal or current project award package, the project will run the risk of a renegotiation of the contract terms.

CUC will determine, based upon the generation information and invoices submitted, whether a project may be at risk for a penalty for overestimation, and notify the contractor. Contractors who have projects that are generating less than expected may request a change in their project award package.

Such a request should describe the circumstances of the lower than expected generation, and explain clearly why the shortfall in generation was not accounted for in the original proposal for the project and in subsequent milestones during project construction.

Contractor shall not be penalized for default if, and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

Force Majeure means any event or circumstance (whether arising from natural causes, human actions or otherwise) beyond the control of the Contractor including strikes, lockouts or other labour disputes, riot, civil commotion, aircraft fire, typhoon, flood, drought loss, delay at sea, breakdown or war in the location where the contractor proposes to source the equipment or major technology required under the contract. However it must be noted that the contractor shall be responsible for any such events and CUC shall not be compensating the contractor except for the agreed rates of delivered energy.

4.0 PROPOSAL EVALUATION AND CONTRACT AWARD

4.1 PROPOSAL EVALUATION COMMITTEE

CUC shall establish an advisory committee to assist it in review of proposals. This may also include consultant/s who have proven track record and back ground of selected renewable technology appointed by CUC, in addition to the members from CUC's management and departments. This committee will assist in the review of proposals and make its recommendations to the Executive Director.

Decision in the formation of the committee and recommendations by the committee shall rest with the Executive Director of CUC. The Executive Director of CUC will have final authority in awarding the contract to the IPP and/or contractors who have proposed the winning proposal/s.

4.2 EVALUATION CRITERIA

The following evaluation criteria, not necessarily listed in order of significance, will be used to evaluate proposals, based on the type of response received for the RFP and the technology application. There will be no ranking of the prospers but only the determination of their capability to be a potential participant and proceed with further process of the RFP and the contract negotiation.

- 4.2.1** The contractor's general approach and plans to meet the requirements of the RFP.
- 4.2.2** The contractor's detailed approach and plans to perform the services required by the scope of work of this RFP.
- 4.2.3** The contractor's documented experience in successfully completing contracts of a similar size and scope to those required by this RFP or as proposed.
- 4.2.4** The overall ability of the contractor, as judged by the evaluation committee, to gear-up, undertake and successfully complete the contract within the fastest required schedule or on time.

- 4.2.5 The cost of the power delivered to CUC (cents per kWh delivered at the point of delivery).
- 4.2.6 The output and capacity of the project, in MWhs and MWs.
- 4.2.7 The environmental attributes of the proposed technology (defined in Section 4.3 below).
- 4.2.8 The timeframe for construction/startup of the project.
- 4.2.9 Feasibility.
- 4.2.10 Verified performance of the technology.

4.3 ENVIRONMENTAL IMPACT

The electricity product offered by a proposal has associated environmental impacts to varying degrees. These environmental attributes include noise, air emissions, water use, land use, wastewater generation and solid waste generation. Contractors shall use Appendix D to provide the information with each proposal.

5.0 PERFORMANCE STANDARDS, GUARENTEES AND WARRANTIES

Contractors shall be required to undertake and provide the following prior to acceptance by CUC. These data shall be further developed after finalization of the technology selected and prior to the contract award:

5.1 PERFORMANCE STANADARDS/TESTS:

STANDARDS/TESTS TO BE FURTHER DETERMINED AS APPLICABLE FOR PROJECT'S TECHNOLOGY - Performance tests shall include guaranteed net electrical output, reliability and availability.

The Performance Tests and Reliability Tests shall be observed and the results approved by CUC and their respective engineering consultants, if available.

5.2 PERFORMANCE GUARENTEES:

Contractor guarantees that the Project shall achieve the following during the Performance Test "Guaranteed Electrical Output" - The Project shall produce average net electrical output (as measured at the Interconnection Point/ Point of delivery) during the Performance Test of not less than _____ kW at 100% output

Other performance guarantees may also include –

- a. A commercial date(s) of operation.
- b. Any limitations or exceptions to the commercial date(s) of operation.
- c. Any penalties and remedies associated with failure to meet the commercial date(s) of operation.

- d. Any penalties and remedies associated with failure to meet any identified or negotiated minimum guaranteed monthly energy production per system.

“Guaranteed Emissions Limits” - The emissions of the Project shall not exceed **applicable emission limits**, and shall in any event comply with all applicable CNMI and US federal laws and permits. The contractor must understand that this is an absolute guarantee and cannot be remedied by the payment of damages.

5.3 WARRANTIES:

Contractor shall provide a general warranty (the “General Warranty”) encompassing the following:

The completed Renewable Energy Projects shall perform its intended functions as a complete, integrated operating system and fully in accordance with the Technical Specifications and tested as detailed in the clause: **STANDARDS, GUARENTEES AND WARRANTIES**. The completed facility will comply with the requirements of the Contract and the Power Purchase Contract Agreement, and with applicable laws and standards.

Details of proposed warranty to be provided to CUC during the contract term shall be described in the proposal.

6.0 CONTRACT AGREEMENT

Notwithstanding the formation of the contract by CUC acceptance of the Contractor's proposal in writing, the Contractor and CUC shall, within 60 days of such acceptance, negotiate, enter into and execute a Contract Agreement.

A draft copy is inserted herein for information – NOT TO BE FILLED BY THE CONTRACTOR. SPECIFIC TERMS WILL BE SUBJECT TO NEGOTIATION WITH SELECTED PROPOSERS.

7.0 INSURANCE

The contractor shall provide for adequate insurance cover for the construction, equipment supply, transport and contractor’s personnel, including third-party liabilities. They shall also institute appropriate insurance cover during the time of normal operation, after commencement of power generation and acceptance by CUC. The policy shall cover CUC and their representatives as co-insured and indemnify and hold them harmless from all third party liabilities and claims, during the constructional and operational phases.

8.0 DELIVERY

Delivery shall be to the site/s, which the contractor and CUC have mutually agreed.

9.0 LANGUAGE

The proposal, documents and contract shall be written in the English language. All literature, corresponding and other documents pertaining to the Contract, which are exchanged by the parties shall be written in that same language.

10.0 APPLICABLE LAW

All the contracts and the RFP documents shall be interpreted in accordance with the laws of CNMI. Attention is also drawn to the Appendix H of the RFP. This includes CNMI statutes which are or may be applicable to this RFP. They are listed for your reference and guidance. This is NOT a comprehensive list of all laws applicable to this RFP.

11.0 DISPUTE RESOLUTION

All questions or differences what so ever which may at any time hereafter arise between the parties hereto or their respective representatives attached to this agreement or the subject matter or construction hereof or the rights and duties of the parties hereunder, shall be referred to a single arbitrator if the parties agree or otherwise, normal dispute resolution procedures applicable in CNMI shall be followed. All disputes shall be resolved in accordance with CUC's Procurement Rules and Regulations, the CNMI Administrative Procedure Act, set forth at 1 CMC § 9101 et. Seq. and applicable laws of the Commonwealth of the Northern Mariana Islands.

12.0 NOTICES

- 12.1 All notices given by one party to the other, pursuant to this Contract shall be sent in writing to the address specified for that purpose as indicated in the Contract.
- 12.2 Without exception, a notice shall be effective only when delivered or on the notice's effective date, whichever is later.

13.0 ACCEPTANCE OR REJECTION OF PROPOSALS

CUC reserves the right to reject any and all proposals pursuant to CUC's Procurement Regulations or may cancel the RFP if to do so would be in the best interests of CUC. This RFP does not commit CUC to award a contract, pay any costs incurred by a proposer in preparing a proposal, to procure or to contract for services.

13.1 Pursuant to § 50-50-240 of CUC's Procurement Regulations, "Responsibility of Bidders and Offerors," Award shall be made only to responsible contractors. To be determined responsible, a prospective contractor must:

- i. Have adequate financial resources to perform the contract, or the ability to obtain them;
- ii. be able to comply with the required delivery or performance schedule;
- iii. have a satisfactory performance record;
- iv. have the necessary organization, experience and skill (or the ability to obtain

- them) required to successfully perform the contract;
- v. have the necessary production, construction and technical equipment facilities, or the ability to obtain them; and,
- vii. be otherwise qualified and eligible to receive an award under applicable laws and rules.

14.0 Attachments

- 14.1 Appendix A – Expression of Interest
- 14.2 Appendix B – Verification and Proposal Information
- 14.3 Appendix C – Environmental Impact
- 14.4 Appendix D – Draft Contract Agreement.
- 14.5 Appendix E – CUC Power Tariff Rates
- 14.6 Appendix F – CNMI Islands location map
- 14.7 Appendix G – Power distribution and transmission one line diagrams
- 14.8 Appendix H – Reference Documents, Rules and Regulations
 - Appendix H 1– Procurement Regulations of the Commonwealth Utilities Corporation.
 - Appendix H 2 – Public Law 15-94 – To establish electric rates for the Commonwealth Utilities Corporation; and for other purposes
 - Appendix H 3 – Public Law 15-88 – To amend Division 4 of Title 4 of the Code by adding a new Part entitled Business Partnerships; to adopt the Uniform Partnership Act (1997) as drafted by the National Conference of Commissioners on Uniform State Laws; and for other purposes
 - Appendix H 4 – Public Law 15-87 -To amend certain sections of PL 15-23; effective 09-26-07.
 - Appendix H5 – Public Law 15-83 - To waive the exemption fee charged by the Dept. of Labor for the hiring of new nonresident workers by new major developments; effective 09-19-07.
 - Appendix H 6 – Public Law 15-35 To create a Public Utilities Commission by repealing and reenacting 4 CMC § 8401 et seq.; effective 10-24-06, as amended by PL 15-43.
 - Appendix H 7 – Public Law 15-23 To establish requirements for the use of renewable energy, energy efficiency and for other energy and cost-saving measures; and to amend Title 4 of the CMC, Division 8, by adding a new chapter entitled "Energy;" effective 08-10-06.