

Ministry of Finance
Republic of the Marshall Islands

Recruitment Announcement
Project Implementation Support Personnel
Power Distribution Supporter

Summary

The RMI Ministry of Finance is inviting interested individuals for the SEDeP Power Distribution Supporter. The Power Distribution Supporter will be expected to provide technical support and advice to the Marshalls Energy Company and the Project Implementation Unit during the design, the supply, the installation, and the operation of the RE Integrated Solution for the SEDeP. The detailed scope of services can be found in the Terms of Reference.

Applications should include the following documents and be submitted before **5:00 pm Majuro Time, February 14, 2017**. The email subject line should state: "SEDeP Power Distribution Supporter Position- full name of the candidate."

- Cover Letter
- CV

The submission must be addressed to:

Jennifer Tseng

Director of DIDA

jenniferytseng@gmail.com

Phone number: +692 625 5968

And cc the following:

Steve Wakefield

Chief Technical Officer, Marshalls Energy Company

swakefield@mecrmi.net

Republic of the Marshall Islands
Ministry of Finance
Terms of Reference
Project Implementation Support Personnel
Power Distribution Supporter

Title:	Sustainable Energy Development Project- Power Distribution Supporter
Location:	Majuro, Republic of the Marshall Islands
Duration:	12 months, subject to extension
Tentative State Date:	March 2018

A. Background

The Republic of the Marshall Islands (RMI) is one of the Small Island Developing States which faces several development challenges, including small land area, limited resources, remoteness, vulnerability to natural disasters and external shocks, etc. The country consists of 29 atolls and five isolated islands (24 of which are inhabited) and has a total land mass of just 181km², which is set in an ocean area of over 1.9 million km². RMI's population is estimated at about 53,000, of which over half are resident in the capital city of Majuro.

The Government of Republic of the Marshall Islands has partnered with the World Bank (WB) in preparing the Sustainable Energy Development Project (the "Project") to be presented for consideration of the WB Board of Directors in December 2017. The estimated International Development Association (IDA) grant for the proposed operation is US\$34 million. The Project Development Objective is to increase the share of renewable energy generation, and enhance the reliability of electricity supply and improve energy efficiency in the country.

The key stakeholders in the energy sector include the Marshalls Energy Company (MEC), the Kwajalein Atoll Joint Utility Authority (KAJUR), the Division of International Development Assistance (DIDA) within the Ministry of Finance, and the Energy Planning Division (EPD).

The proposed Project will include the following components:

Component 1: Renewable Energy Investments. This component will include the following two sub-components:

Sub-component 1.1: Renewable Energy Development in Majuro. This sub-component will finance the design, supply, installation, and operational support for solar power generation, battery energy storage, and grid management equipment in Majuro. The activities to be supported include (i) conducting a detailed survey, preliminary design, cost analysis, preparation of bidding documents, and supervision of engineering, procurement, and construction (EPC) contractor; (ii) installation of an estimated three MW of solar power-generation, inverters, battery storage, grid-connection, and other ancillary equipment needed to support the contribution of renewable energy in RMI's generation system and reduce diesel generation; and (iii) provision of assistance on operations and maintenance and capacity building activities to enhance knowledge transfer and sustainability of the technology supplied and installed. An initial assessment

on potential sites (owned or leased by GoRMI) available to host the arrays of PV panels include MWSC's water reservoir near the airport, some public schools and public buildings, the empty space adjacent to the Majuro hospital, and some basketball fields in the city. The water reservoir is the primary candidate for several reasons: it would serve both MWSC and MEC generation purposes in a situation of limited land availability; it would reduce evaporation currently experienced by MWSC; it concentrates half of the potential sites' total capacity; it avoids anticipated potential distribution constraints; and, due to its size and relative proximity with MEC's existing thermal generation facilities, a power distribution feeder can easily be erected to convey the generated RE from the reservoir site to the power plant. If the reservoir is used, this would involve installation of floating or fixed solar PV panels in the reservoir. This component will also address the lining of the reservoir as needed during implementation. More information is provided in the Technical Assessment section below and in Annex 1. Site selection will be confirmed during the preparation of the bidding documents.

Sub-component 1.2: Supply and Installation of Gensets for Majuro and Ebeye. This sub-component will finance gensets (low/medium or high-speed depending on studies) for MEC and KAJUR's power plants in Majuro and Ebeye to help accommodate the planned grid solar capacity, and to improve fuel efficiency and system reliability.

Component 2: Promotion of Energy Efficiency and Loss Reduction Program. This component will provide technical and operational assistance and will complement Component 1 by reducing energy demand through improving the efficiency for both use and supply of electricity from MEC and KAJUR. It will include the following three sub-components:

Sub-component 2.1: Loss Reduction Program in Ebeye. This sub-component will support design and implementation of a loss reduction program for KAJUR to address issues related to supply-side management (SSM). Current losses are estimated at approximately 30 percent in Ebeye. This is mostly caused by technical mismatches in facility configurations and operations. A loss reduction study will be prepared by external consultants to provide recommendations to achieve loss reduction. Recommendations from the study that are designed to increase the energy efficiency of essential energy infrastructure will also be supported under this sub-component, and may include activities such as downsizing transformers, upgrading distribution lines, and the installation of meters for monitoring usage.

Sub-component 2.2: Demand Side Energy Efficiency. This sub-component will support activities designed to enhance efficient use of energy. This could include such activities as enhanced insulation in buildings and replacement of inefficient lighting or appliances in said buildings. External consultants will provide recommendations to harness best available technologies. This sub-component will also support information awareness campaigns, workshops, training, and education on demand-side management and energy efficiency. It will also support development of policies and regulations for energy efficiency, as well as the development of standards and labeling for energy efficiency, including phasing out inefficient incandescent bulbs and more stringent standards for appliances. Activities aimed at raising consumer awareness on energy efficiency and related capacity-building activities and training will also be supported under this sub-component.

Component 3: Technical Assistance, Capacity Building and Project Management

Sub-component 3.1: Technical Assistance and Capacity Building. This sub-component will enhance the capacity of the Ministry of Finance (MoF), MEC, EPD, KAJUR and Majuro Water and Sewer Company (MWSC) to support efficient energy sector operation, including: (i) carrying out Training and Workshops on energy sector policies, regulatory framework, management, and planning; (ii) conducting studies and provision of technical assistance to enhance EPD's role in the sector; (iii) provision of technical assistance to establish the O&M Fund to ensure sufficient funds for the operation and maintenance of the renewable energy investments supplied and installed under Part 1 of the Project; and (iv) mainstreaming of gender dimensions into the Project. Provision of technical assistance, training and workshop to support mainstreaming of gender dimensions in the project will be financed under this sub-component.

Sub-component 3.2: Preparation of Renewable Energy Projects in Ebeye and the Outer Islands. This sub-component will support the preparation of studies to identify further assistance and investments needed on renewable energy in Ebeye and the Outer Islands (Wotje, Jaluit, Rongrong, and Santo), including the design of the potential renewable energy projects and preparation of related documents include design documents and the preparation of technical specifications.

Sub-component 3.3: Project Management. This sub-component will support MEC and MoF to manage and implement the Project, including provision of support on Project coordination, monitoring and evaluation, reporting, procurement, financial management, audit, safeguards management, and technical operation. The project's incremental operating costs will be financed as well as office equipment and project audits.

B. Project Implementation Arrangements

The implementation period for the Project is planned to take up to four years. The Project has been presented to the World Bank's Board of Directors for approval in December 2017.

MEC will be responsible for overall Project implementation. A Project Implementation Unit (PIU) will be established within MEC and include a Project Manager and other key staff. The project accountant and the procurement specialist recruited by DIDA will be providing the necessary support to the PIU. The safeguards specialist to be recruited by DIDA under the PREP Project will also support the PIU on safeguards implementation and compliance. The Project Manager will be responsible for overall project coordination and technical guidance and will support the procurement of the different packages and studies. Technical staff will be recruited, as necessary, to support implementation of Component 2 at EPD. The Project Manager will report to the Chief Executive Officer (CEO) of MEC and to the Project Steering Committee (PSC). The Ministry of Finance (MoF) will be responsible for processing Project disbursement requests.

The institutional arrangements will also include a Project Steering Committee (PSC) that will comprise the Chief Secretary, the Ministry of Finance, the Ministry of Resources and Development (represented by EPD), as well as representatives from MEC, KAJUR and from Kwajalein Atoll Development Authority (KADA) and others, as needed. The PSC will govern the Project and will provide the oversight and strategic guidance for the project implementation. The chair of the PSC will be defined at a later stage by the GoRMI.

A Project Implementation Manual (PIM) will set out: such as: (i) the criteria and procedures to be used for the selection of energy efficiency investment activities undertaken under Sub-component 2.2, (ii) institutional arrangements for day-to-day execution of the project; (iii) the procurement plan and implementation arrangements; (iv) guidance on implementation of safeguard instruments; (v) budgeting, disbursement, and financial management processes; and (vi) project monitoring, reporting, evaluation, and performance indicators including implementation of, and compliance with, Bank safeguard policies; and (vii) the boundaries of defined Project Areas and the criteria and procedure for selecting additional Project Areas.

C. Scope of Work

The Power Distribution Supporter will be recruited to provide technical support and advice to the MEC and the PIU during the design, the supply, the installation, and the operation of the RE Integrated Solution for the SEDeP. The Power Distribution Supporter will provide the following services:

- Oversee and coordinate the safe and efficient operation, maintenance and overhaul of all Distribution systems within the combined utilities during the SEDeP preparation and implementation
- Oversee the protection of the networks with the introduction and operation of Integrated Renewable Energy Solutions funded by the SEDeP while establishing and implementing related safe operational and maintenance procedures
- Coordinate, schedule and plan all distribution system related work activities with the Distribution Supervisory team, MEC Generation Manager and Management team, and the PIU
- Develop or update material specifications where needed and monitor procurement of Distribution service items for both normal operations and projects
- Provide supervision and skill enhancement of local staff in all related areas of service
- Develop and oversee the specific training needs of employees who are participating in advanced vocational training programs coordinating with the HR department
- Coordinate the design and transition of remote island systems to hybrid systems
- Support the Project Manager in designing the energy efficiency program
- Maintain, control and further develop maintenance procedures for all operations
- Provide hands-on training and mentorship to at least two identified MEC technicians or staff
- Perform other duties or projects as required or as assigned by the MEC Management.

The Power Distribution Supporter will report to the MEC Chief Technical Officer and the Project Manager at PIU and is accountable to the MEC Chief Executive Officer and the Management Team.

- Work closely with subordinate engineers, superintendents, supervisors, MEC Department Heads, and Project Manager at PIU;
- Prepare monthly progress reports to the MEC Chief Technical Officer and the Project Manager in PIU; and

- Work closely with the Project Manager at PIU to ensure that the technical information of the existing distribution network is precisely presented for SEDeP project preparation and implementation.

D. Desired Skills, Qualification and Experience

- The Power Distribution Supporter should possess necessary qualifications in electrical engineering with the minimum requirement of Diploma from an accredited institution and have had over seven (7) years of practical works experience in an electricity supply utility environment. Or, the Power Distribution Supporter should possess a Bachelor Degree in electrical engineering with the minimum of five (5) years practical works experience in an electricity supply utility environment.
- An excellent working knowledge, operational and on-site experience and skills of RE systems and service provider networks, both on and off grid and the interconnection to networks are essential.
- Skillsets in both overhead networks on poles and underground systems, high voltage monitoring, live line work, fault detection and locating, infra-red thermal scanning, meter and equipment calibration testing, load data monitoring collection, advanced metering systems, SCADA setup and operation, integrated controls and monitoring systems, transformer analysis and utilization, VCB, switchgear & relay function testing and maintenance, network design, develop and run training programs in both technical skillsets and safe practices are some of the essentials required.
- Administration skills including report writing, general computing skills, ArcGis utilization and updating, digital template construction for deliverables, maintenance of databases and computer logging/control systems, development of quality control and safety procedures are essential.
- Knowledge and hands-on experience of electricity sector issues in the Marshall Islands or small islands is highly desirable.

E. Reporting and Deliverables

The Power Distribution Supporter will consult with the MEC Chief Technical Officer and the Project Manager at PIU in terms of report contents and scopes and submit the reports and deliverables according to the agreed timetable with the acceptable professional standards, including but not limited to:

- Monthly Progress Reports. The Power Distribution Supporter shall prepare a technical progress report summarizing the work accomplished. The report should at least outline any technical problems encountered and give recommendations on how these problems may be overcome.
- Technical Reports. The Power Distribution Supporter will produce as necessary technical reports and position papers dealing with technical matters arising during the project.

F. Duration, Location, and Conditions of Assignment

The Power Distribution Supporter is to be recruited for an initial period of 12 months on a full time basis, with the possibility of extension for the duration of Project implementation based on satisfactory performance. The position would be subject to a probationary period of three (3) months.

The position is a full-time position to be located in Majuro, RMI. Domestic and international travel will be required from time to time.

The Government of RMI will provide the Financing Agreements, WB Guidelines, and all the existing reports and materials related to the SEDeP. The Power Distribution Supporter will be housed in the Marshalls Energy Company (MEC) in Majuro.

The total remuneration package, including salary and other benefits will be up to US\$150,000.00 per annum subject to negotiation based on previous documented contracting experience and compensation history. The Power Distribution Supporter is subject to 10% RMI non-resident income tax. The Power Distribution Supporter is fully responsible for the cost of local transportation (to/from local housing to the MEC office). Travel to the States, other Pacific Countries or local travel away from the base office shall be supported from the budget for operating costs under the project as per applicable MoF policies for airfare, accommodation and per diem. Working hours would be consistent with the MEC hours. Some overtime may be required for timely delivery of responsibilities. Time in lieu would only be granted in exceptional circumstances and with the written approval of the MEC Chief Technical Officer and the Project Manager at PIU.

Other benefits include:

- Mobilisation from originating location. (*Government policy to be applied – reimbursable for airfares and payment for shipping*)
- Home leave once in a 12 month period. (*travel follows government policy which includes airfare and per diem on travel stops. Reimbursable arrangement*)
- Leave provision 30 working days (includes 10 working days sick and 20 working days annual) in addition to public holidays observed by the Government of RMI.
- Housing allowance
- Cost of Living allowance