

MARSHALLS ENERGY COMPANY INC.

P.O. Box 1439 - Majuro - Marshall Islands - MH 96960 Tel. (692) 625-3827 - Fax (692) 625-3397 Email meccorp@ntamar.net

REQUEST FOR EXPRESSIONS OF INTEREST (REOI)

SELECTION OF AN INDIVIDUAL CONSULTANT

Marshalls Energy Company (MEC)

Republic of the Marshall Islands
Sustainable Energy Development Project (SEDeP)

Loan No./Credit No./ Grant No.: **D261-MH**

Opening Date: Sept 1, 2019 Closing Date: Sept 30, 2019

Assignment Title: <u>Power Specialist (Intermittent)</u> Reference No. : <u>MH-MEC-123331-CS-INDV</u>

The Republic of Marshall Islands has received financing from the World Bank toward the cost of the Sustainable Energy Development project (SEDeP), and intends to apply part of the proceeds for consulting services.

The consulting services ("the Services") include "To assist MEC to achieve the ambitious climate change and renewable energy goals of GRMI, particularly through supporting the implementation of Sustainable Energy Development Project (SEDeP) and its subsequent phases funded by WB. The Power Specialist will develop, build and communicate the strategic vision and goals of MEC with the aim to prepare for SEDeP's subsequent phases; technically guide and support implementation of SEDeP in consideration of coordination and cooperation with projects and programs funded by donors to achieve the goals of MEC in consultation with GRMI. The duty location will be MEC Office, Majuro, Marshall Islands. The duration will be up to 120 working days in the first 12 months, with expected start date of Oct 1, 2019 or as soon as possible.

The detailed Terms of Reference (TOR) for the assignment is attached.

The Marshalls Energy Company (MEC) now invites eligible individuals ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services (attach curriculum vitae with description of experience in similar assignments, similar conditions, etc.). Firms' staff may express interest through the employing firm for the assignment and, under such situation, only the experience and qualifications of individuals shall be considered in the selection process. The criteria for selecting the Consultant are:

- A Master's degree(s) in engineering, or other related fields is required; MBA in addition to Master's in engineering is desirable.
- At least twenty (20) years of electricity sector experience; experience in working with diesel generators and renewable energy desirable.
- Experience working with development partners such as WB, ADB, JICA, EU/EIB highly desirable;
- Previous work in the Pacific is highly desirable; and

Knowledge of electricity sector issues in small systems is highly desirable

The attention of interested Consultants (including firms) is drawn to paragraph 3.14, 3.16 and 3.17 of the World Bank's *Procurement Regulations for Borrowers* under Investment Project Financing dated July 1, 2016("the Regulations"), setting forth the World Bank's policy on conflict of interest.

Further information can be obtained at the address below during office hours; 0900 to 1700 hours.

Expressions of interest must be delivered in a written form to the address below (in person, or by mail, or by fax, or by e-mail) by September 15, 2019.

Fax: (692) 625-5886 Tel. (692) 625-3827/8/9

Jack Chong-Gum, CEO
Marshalls Energy Company (MEC)
P O Box 1439,
Majuro, Marshall Islands 96960
jack.chonggum@mecrmi.net
Phone no. (692) 625 3827/8

Cc the following:

Kamalesh Doshi SEDeP Project Manager <u>Kamaleshdoshi6@gmail.com</u> Phone no. (802) 310 2682

TEMPLATE FOR CURRICULUM VITAE (CV)

Name of Expert:	{Insert full name}
Date of Birth:	{day/month/year}
Country of Citizenship/Residence	

Education:	{List college/ui	niversity or other	r specialized	education,	giving names	of educational
institutions,	dates attended,	degree(s)/diplon	na(s) obtaine	d}		

Employment record relevant to the assignment: {Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.}

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005- present]	[e.g., Ministry of, advisor/consultant to		
	For references: Tel/e-mail; Mr. Hbbbbb, deputy minister]		

Membership in Professional Associations and Publications:		
Language Skills (indicate only languages in which you can work):		

Adequacy for the Assignment:

Reference to Prior Work/A Tasks	Assignments that Best Illustrates Capabilit	y to Handle the Assigned
Expert's contact information	on: (e-mail, phone)
my qualifications, and my exassignment in case of an awar	to the best of my knowledge and belief, this oxperience, and I am available, as and when d. I understand that any misstatement or misson or dismissal by the Client, and/or sanction	n necessary, to undertake the epresentation described hereir
		{day/month/year}
Name of Expert	Signature	Date

Marshalls Energy Company Republic of the Marshall Islands

Terms of Reference Power Specialist- Individual Consultant

Title:	Power Specialist- Individual Consultant
Location:	Majuro, Republic of the Marshall Islands
Duration:	Up to 120 working days in first 12 Months after signing the contract An expected extension for up to 120 working days per year for further 2 years, subject to contractor performance, MEC and GRMI requirements and budget approval.
Tentative State Date:	Oct 2019 (or as soon as possible)

1. BACKGROUND INFORMATION ON THE PROJECT

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 total land mass of just 181 km2, which is set in an ocean are 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 key stakeholders in the energy sector include the Marshalls Energy Company (MEC), the Kwajalein Atoll Joint Utility Authority (KAJUR), the Combined Utility Board (CUB), the Division of International Development Assistance (DIDA) within the Ministry of Finance (MoF), and the National Energy Office (NEO). RMI's development partners in the energy sector include the World Bank (WB), Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), the European Union (EU) and bilateral partners such as the United States, New Zealand, Australia, Taiwan and the United Arab Emirates.

The WB has approved funding of US\$ 34.00 million for the Sustainable Energy Development Project (SEDeP). The implementation of SEDeP has been started from April 2018, with total duration of about 4 years. 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.

SEDeP includes the following components:

Component 1: Renewable Energy Investments (IDA US\$28.63 million). This component includes the following two sub-components:

Sub-component 1.1: Renewable Energy Development in Majuro (US\$23.6 million). 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 GRMI) available to host the arrays of PV panels include MWSC's water reservoir near the airport, some public schools and public buildings, 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. 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 (US\$5.03 *million).* This sub- component will finance gensets (low/medium or high-speed depending on studies) for MEC's 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 (US\$2.45 million). 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 includes the following three subcomponents:

Sub-component 2.1: Loss Reduction Program in Ebeye (US\$1.4 million). This sub-component will support design and implementation of a loss reduction program for KAJUR to address issues related to supply-side management. 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 (US\$1.05 million). 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 (IDA US\$2.92 million).

Sub-component 3.1: Technical Assistance and Capacity Building (US\$0.335 million). This sub-component will enhance the capacity of the Ministry of Finance, Banking and Postal Services (MFBPS), MEC, EPD, KAJUR, and 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

an O&M fund to ensure sufficient funds for the operation and maintenance of the renewable energy investments supplied and installed under Component 1 of the project; and (iv) mainstreaming of gender dimensions into the project.

Sub-component 3.2: Preparation of Renewable Energy Projects in Ebeye and the Outer Islands (US\$0.6 million). 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, Rong Rong, 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 (US\$1.985 million). This sub-component will support MEC and MFBPS 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.

Project Implementation Arrangements

MEC is responsible for overall Project implementation. A Project Implementation Unit (PIU) has been established within MEC and include a Project Manager, Project Implementation Officer and other key staff. The project finance manager, safeguards specialist and the procurement specialist recruited by DIDA under Central Implementation Unit (CIU) will be providing the necessary support to the PIU. 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 NEO. 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 project implementation Officer would be Marshallese national and will report to and support the Project Manager for all activities of the project.

The institutional arrangements also include a Project Steering Committee (PSC) that comprise the Chief Secretary, the Ministry of Finance, the Ministry of Environment (represented by NEO), as well as representatives from MEC, KAJUR and from Kwajalein Atoll Development Authority (KADA) and others, as needed. The PSC governs the Project and provides the oversight and strategic guidance for the project implementation. The chair of the PSC is the Chief Secretary of GRMI.

A Project Implementation Manual (PIM) has set out: such as: (i) the criteria and procedures to be used for the selection of energy efficiency investment activities undertaken under Subcomponent 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 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.

2. OBJECTIVE (S) OF THE ASSIGNMENT

"To assist MEC to achieve the ambitious climate change and renewable energy goals of GRMI, particularly through supporting the implementation of Sustainable Energy Development Project (SEDeP) and its subsequent phases funded by WB. The Power Specialist will develop, build and communicate the strategic vision and goals of MEC with the aim to prepare for SEDeP's subsequent phases; technically guide and support implementation of SEDeP in consideration of

coordination and cooperation with projects and programs funded by donors to achieve the goals of MEC in consultation with GRMI.

3. Scope of Work & Description of Tasks

The Power Specialist will advise the CEO of MEC and PIU at MEC for the overall implementation and delivery of the components of SEDeP in consideration of coordination and cooperation with the WB and other donor funded projects. The Power Specialist will also provide technical review of the designs, technical specifications, monitoring and evaluation under SEDeP and assist CEO in taking the most appropriate decisions for MEC. The Power Specialist will work closely with the Project Manager of SEDeP and perform part of the implementation of SEDeP when necessary.

Specifically, under the overall coordination and supervision of the CEO, MEC, he/she is to perform the following tasks:

A. Technical Guidance

- Review the technical specifications for the procurement of the different equipment and studies to be financed for MEC and KAJUR and monitor the testing and commissioning of the equipment.
- Review ToRs for the technical capacity building assistance under SEDeP;
- Supervise the consultants providing technical capacity building assistance to the utilities for improving their technical performance and implementing maintenance plans.
- Provide technical expertise and assistance on the different activities to be implemented under the Project and to MEC as needed;
- Review and provide technical guidance to the consultants preparing the different studies;
- Manage the technical inputs required from the MEC and KAJUR for project activities and ensure pertinent information required for studies and activities to be performed by international/national counterparts;
- Review the Project Subsidiary Agreements between MEC, KAJUR and NEO, as needed;
- Other duties applicable to the proposed project as delegated by MEC specifically.

B. Monitoring and Evaluation

- Review the performance of power plants after implementation of SEDeP by MEC
- Review the monitoring and evaluation (M&E) reports prepared by the project manager;
- Prepare monthly review and progress report of technical services provided to the CEO of MEC;

4. EXPECTED OUTCOMES/DELIVERABLES WITH TIMELINES

The deliverables of the Power Specialist will include the following but not be limited to:

- Monthly review and progress report of technical services provided to the CEO of MEC
- Review reports of technical specifications and design drawings for all supply and installation work carried out for the WB funded projects.
- Review of the Annual and Mid-term review reports of the WB funded projects;
- Review of the project Completion report.

5. DURATION OF THE ASSIGNMENT AND ESTIMATED EXPERT-TIME INPUT

The Power Specialist is to be recruited for an initial period of 12 months on an intermittent basis, with up to 120 working days in 12 months period, with the possibility of extension for the duration of Project implementation (expected to be four years) based on satisfactory performance. The position would be subject to a probationary period of three (3) months.

6. REPORTING REQUIREMENTS

The Power Specialist will report directly to the CEO of MEC.

7. CLIENT'S INPUTS

The MEC will assist the Power Specialist to secure and reimburse the costs of all permits, licenses and the like as may be necessary and directly related to his engagement.

The MEC will provide access to information and data and assist for organizing field visits and meetings with counterpart agencies as needed. Travel and per diem costs will be reimbursed. The MEC will assist the Advisor in securing a suitable furnished housing in close proximity to the workplace.

The MEC will provide the Advisor with suitable office facilities and equipment within the MEC office.