

STATE OF HAWAII
HAWAII COMMUNITY DEVELOPMENT AUTHORITY
KALAELOA
Honolulu, Hawaii

December 6, 2017

Chairperson and Members
Hawaii Community Development Authority
State of Hawaii
Honolulu, Hawaii

Hawaii Community Development Authority Kalaeloa Board Members:

SUBJECT

Shall the Authority Authorize the Interim Executive Director to Expend Up to \$450,000.00 from the Kalaeloa Community Development Revolving Funds Leasing and Management Subaccount to Retain a Consultant Assist the Hawaii Community Development Authority to prepare Technical and Financial Studies and a Request for Proposal for the Kalaeloa Safe and Reliable Energy Infrastructure Project in the Kalaeloa Community Development District?

EXECUTIVE SUMMARY

With several development projects in the Kalaeloa Community Development District (District), it is necessary for the Hawaii Community Development Authority (HCDA) to develop a strategy for safe and reliable energy infrastructure. The District is currently served by a legacy power infrastructure owned and operated by the United States Navy (Navy). The HCDA needs to work with the Navy to establish a safe and reliable electric infrastructure in the District. This work includes, but is not limited to evaluation of the existing infrastructure; analysis of ownership and technical options; procurement and selection of a public or private partner to upgrade, operate, and maintain the infrastructure; and negotiation and transfer proceedings with the Navy.

Staff is requesting the Authority's approval to authorize the Interim Executive Director to expend up to \$450,000 to retain a consultant for the work required for the Kalaeloa Safe and Reliable Energy Infrastructure Project (SREIP).

AUTHORITIES

Hawaii Revised Statutes § 206E-4.

BACKGROUND

The base realignment and closure of Naval Air Station Barbers Point occurred in 1999. Since then the Navy-owned electrical grid has continued to deteriorate. The existing electric infrastructure in the District requires substantive capital improvements to function safely and reliably. The current system experiences routine scheduled power outages that can last from four to twelve hours, with

some customers experiencing up to forty hours of outages a year. The Hawaiian Electric Company (HECO) has not been willing to accept the current system, due to concerns regarding deficiencies of the existing electrical infrastructure and potential environmental liability.

The Navy currently provides about 24 Megawatts of power to the District through two substations which draw power from HECO. The Kalaeloa Master Plan projects a peak load of 45-60 Megawatt in the District in phases over a 20-year horizon. The condition of the electric infrastructure has been the major impediment in redevelopment of the district. Though several piecemeal electric infrastructure upgrade projects are slated to begin within the next year, the HCDA needs to plan for a comprehensive upgrade of the electric infrastructure in the district. These projects include the Enterprise Road corridor (a 12kV line to the FBI, and to Kalaeloa Airport in a second phase), and the Coast Guard's East Energy Corridor which utilizes Coral Sea Road.

In August 2016, the HCDA in partnership with the State Energy Office, Department of Energy, and the Sandia National Laboratories (SNL) conducted a Kalaeloa landowners summit to discuss district challenges and explore the potential for the use of microgrids as one of the solutions to providing reliable energy surety in the district. From the feedback gathered at the summit and follow-up discussions with landowners, the SNL produced the "Kalaeloa Energy System Redevelopment Options Including Microgrids" report (Report). In April 2017, the HCDA held an industry briefing for the interested organizations and experts that produce and provide electrical services in the state and across the country. The Navy reiterated in its presentation its desire to convey the electrical grid to HCDA and completely divest itself from the system. Other companies expressed the desire to partner with HCDA to potentially operate the grid and develop new systems to provide reliable energy services to existing and new customers in the district.

ANALYSIS

The SREIP aims to develop a strategy for safe and reliable energy infrastructure for the District. Ultimately, the electric system must serve the District residents and businesses in a way that is compliant with all regulatory requirements, and that supports the goals outlined in the Kalaeloa Master Plan. Staff believes that a study exploring engineering, environmental, financial, and regulatory issues in implementing the Kalaeloa SREIP is necessary in moving forward. The HCDA needs to evaluate the efficacy of transferring the existing electrical infrastructure from the Navy and continuing to maintain and improve it over time, against constructing a completely new electric infrastructure. The study will explore and evaluate various alternatives that may be available in implementing the SREIP. Since the HCDA does not have inhouse expertise in this area, an outside consultant with the necessary expertise is required to assist HCDA staff. It is anticipated that the consultant's scope of work will include developing electric infrastructure and utility model, evaluating transfer of the electric infrastructure from the Navy; environmental review of the existing electric infrastructure; economic feasibility analysis, including order of magnitude capital costs and revenues; developing a request for proposal for developing, financing, operating and maintaining the electric infrastructure; and assisting the HCDA in evaluating proposals received for implementing the SREIP. A summary of scope of work is provided below.

Some of the scope of work may need to be revised and/or expanded based on discussions with potential consultants.

SUMMARY OF SCOPE OF WORK

Task 1. Infrastructure and Utility Model

The consultant will assist the HCDA in evaluating various alternatives for providing safe and reliable energy in the District. Acquisition of the existing electric infrastructure (EI) from the Navy, or development of a new EI will be a prerequisite for the identification and development of alternatives. As a precursor to the analysis, the consultant will assess options for the transfer of the existing EI from the Navy, as well as development of a new EI.

1.1. Identification of Viable Alternatives: The consultant will research electric utility delivery model options to develop a list of viable alternatives to achieve the desired end-state of the SREIP in the District. Alternatives may include the production as well as management and distribution of power. At a minimum, the alternatives to be considered should include:

- **Utility Privatization (UP)** – sale of EI assets associated with a corresponding Utility Service Contract;
- **Outsourcing** – EI Operations and Maintenance (O&M) contract with Capital Investment Program (CIP) financing element;
- **Enhanced Use Leasing (EUL)** – real estate agreement that provides land for infrastructure development that also includes CIP financing;
- **Public Utility Options** – rate base option through a regulated electric utility company, with CIP rate surcharge; and
- **Energy as A Service (EAAS)** – comprehensive electrical service, including O&M, utility services, and modernization requirements, through a longer term contractual arrangement.

1.2. Assessment of Risks and Opportunities: Following the development of viable alternatives the consultant will assess the Risks and Opportunities to determine the advantages and disadvantages of each alternative. The assessment will include the legal and regulatory aspects, financing considerations, market potential, and implementation schedule impacts. Legal and regulatory considerations will include, at a minimum, the viability of an electrical co-operative within the District, the potential impact of the Utility Model Study being conducted by the Hawaii State Energy Office, and the dockets presently before the Hawaii Public Utilities Commission. The task will include input from stakeholders in the District, elected officials representing the area (State House, State Senate, City and County Council members), and other concerned parties identified by the HCDA. The consultant will facilitate meetings with the stakeholders to conduct the assessment, establish the evaluation criteria, and solicit input on the process. The intent will be to obtain a balanced perspective of the various alternatives, and to determine the weighting evaluation criteria for the subsequent Analysis of Alternatives.

1.3. Analysis of Alternatives – Selection of Preferred Approach: The Analysis of Alternatives will utilize the weighted evaluation criteria developed in the Risks and Opportunities Task, to determine the preferred alternative. Analysis could be conducted by a panel of stakeholders convened by HCDA and facilitated by the consultant. The consultant will prepare a summary report of the Analysis of Alternatives, including a tabulation of the ratings for each alternative considered. Analysis should include a Preliminary Economic Analysis (PEA) of alternatives based upon the original cost estimates from the Report, as adjusted based upon the financing and costing methodologies for the delivered power costs over the study period (30 years). The consultant will review and update the selected technical solution to be used as the basis of comparison for the various acquisition alternatives. To simplify and expedite the PEA, assumptions regarding elements of the analysis will be derived from existing sources such as the following:

- Inflation and discount factors – Federal OMB Circular A-94;
- Bulk power prices – HECO Integrated Resource Planning (IRP), Power Supply Improvement Plan (PSIP), and other sources;
- Renewable Energy prices – Sandia Report, and recently awarded Power Purchase Agreements;
- Initial System Deficiency Correction capital costs, O&M costs, R&R schedules, and overhead costs – from Sandia Report.

1.4. Evaluation of transfer of existing EI from the Navy: The consultant will engage the US Navy Region Hawaii to explore methods to transfer the existing EI from the Navy to the HCDA, or directly to a HCDA selected operator. The consultant will identify options for transfer of the EI such as:

- **Federal Utility Privatization (UP)** – sale of electric infrastructure assets associated with/without a corresponding Utility Service Contract in accordance with 10 USC 2688 legislation;
- **Special Legislation** – “gifting” electrical infrastructure assets to the HCDA through special legislation, such as inserted language in the National Defense Authorization Act (NDAA); and
- **Inter-Governmental Support Agreement (IGSA)** – inclusion of electrical infrastructure asset transfer in an IGSA between the US Navy and the HCDA; the IGSA may include a Utility Service Contract to provide power delivery to US Navy facilities/housing.

Subsequent tasks below may need to be revised based on the consultant's recommendation in this phase of work.

Task 2. Environmental Review Process

The Environmental Review Process will become necessary if, based on the analysis completed in Task 1, it is determined that the best option is transfer of the existing Navy EI to the HCDA or an operator selected by the HCDA. The Environmental Review Process will include establishing the

Environmental Condition of Property (ECOP) through the Environmental Baseline Survey (EBS) method.

2.1. ECOP: The ECOP effort will include conducting the EBS and providing a summary report that identifies and clarifies the environmental liabilities associated with the existing Navy EI. The EBS identifies and summarizes the known environmental contamination of the land traversed by the utility infrastructure, and may include issues with the infrastructure itself. The EBS will include Geographical Information System (GIS) data that provides an overlay of known contamination sites and utility infrastructure.

2.2. Finding of Suitability to Transfer (FOST): The FOST is a summary statement that enables the transfer of real property assets (infrastructure). The FOST may be a Navy document, depending upon the outcome of the initial step in the process. The FOST may also be a HCDA document necessary for the subsequent transfer of assets. Additional remediation of contamination may be necessary to achieve FOST. Once sufficient remediation occurs, FOST determination could be made. The FOST and associated documentation will be included in a technical library, provided to potential offerors in the RFP phase.

Task 3. Solicitation Development

The Solicitation Development task will include technical, financial, and contracting support services to develop the RFP based on the preferred alternative developed in Task 1. This work will, at a minimum, include the following tasks.

3.1. Solicitation Plan: The Solicitation Plan will define the preferred approach, describe the requisite activities, provide an assessment of the resources required, describe roles and responsibilities, and provide a proposed timeline. The Solicitation Plan shall provide essential information, such as:

- Critical Prerequisites (ex: conveyance of EI from US Navy or development of new EI);
- Contracting Approach (ex: broad performance based vs. narrow prescribed scope of services, best value vs. low cost technically acceptable, etc.);
- Source Selection Structure and Process (composition and procedures for the Technical and Price evaluation);
- Evaluation Criteria – identification and weighting of criteria.

3.2. Existing EI Inventory & Condition Assessment: Existing EI inventory will be based on available GIS format; electrical system components will be described in Federal Energy Regulatory Commission (FERC) format. The consultant will conduct a condition assessment of the existing EI assets, including a review of all available studies, designs, plans, and other documentation. This specific task will be necessary only if the determination is to transfer existing EI from the Navy.

3.3. Capital Investment Plan (CIP): The CIP will include the development of the initial capital upgrade projects, and the long-term capital upgrades to the existing EI or CIP for new EI necessary to implement the SREIP in the District. Deliverables will include concept designs and preliminary cost estimates with an associated timeline for upgrades of existing EI or development of new EI.

3.4. HCDA Cost Estimate (CE): CE will be prepared in a Life-Cycle Cost Analysis (LCCA) format incorporating the CIP projects, predicted Operations and Maintenance (O&M) costs, and the Renewals and Replacements (R&R) schedule for re-capitalization of the system to assure long-term reliability and efficiency. The CE forms the basis of comparison with offerors price proposals, and provides vital information necessary for negotiations. CE will be prepared for both transfer of existing Navy EI or development of new EI.

3.5. RFP: The RFP will be prepared per requirements of the Hawaii Revised Statutes §103D-303 and Hawaii Administrative Rules, Chapter 3-22, and will include all necessary technical information, proposal guidelines, proposal evaluation guidelines, pricing structure, pertinent contract clauses, performance requirements, and the essential attachments that describe the System Inventory, Condition Assessment, Capital Upgrade requirements, and proposal details. The RFP task also includes the compilation of the technical library to be made available to offerors. The technical library may include studies, plans, environmental documents, and other information.

Task 4. Proposal Evaluation & Decision Analysis

4.1. Technical Evaluation: The consultant is to provide electrical engineering expertise to the HCDA RFP evaluation committee, to help evaluate the proposals received. The consultant will not be a member of the RFP evaluation committee; however, the consultant will assist the RFP evaluation committee in rating technical portions of the proposals.

4.2. Pricing Analysis: The consultant will provide Pricing Analysis of the proposals, including the LCCA of the proposals. Pricing Analysis support will continue throughout the Proposal Evaluation process, including updates and revisions as the evaluation proceeds.

4.3. Best and Final Offer (BAFO) Discussions: The consultant will provide assistance to the RFP evaluation committee during the BAFO discussion with short listed Offerors.

4.4. Business Case Analysis (BCA): The consultant will prepare a BCA that assesses the benefits and costs of the selected offeror (as applicable). The BCA will include sensitivity cases that collectively provide an overview of implementation scenarios. Sensitivity cases typically provide a range of outcomes based on critical variables, such as interest rates, power cost projections, energy load growth projections, etc. and will assist the RFP evaluation committee in the selection process.

The consultant's work is broken down into discrete task orders so that any decision in moving forward with each subsequent task is dependent on the outcome of the previous task. Staff is

estimating that \$450,000 will be adequate to complete analysis and due diligence necessary to make an informed decision on implementing the SREIP.

RECOMMENDATION

Staff recommends that the Authority authorize the Interim Executive Director to expend up to \$450,000 from the Kalaeloa Community Development Revolving Funds to Retain a Consultant to Assist the Hawaii Community Development Authority to prepare Technical and Financial studies and a Request for Proposal for the Kalaeloa Safe and Reliable Energy Infrastructure Project in the Kalaeloa Community Development District.

Respectfully submitted,

Tesha Malama
Kalaeloa Director of Planning and Development

APPROVED FOR SUBMITTAL:

Garett H. Kamemoto, Interim Executive Director
Hawaii Community Development Authority