



## Request For Proposal

For Renewable Resources to Supply Energy Only

SP2005-02

12/2/05

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## **SECTION 1: INTRODUCTION**

Kauai Island Utility Cooperative (KIUC) issues this Request for Proposal (RFP) to solicit competitive proposals for energy-only renewable energy sources. Renewable and fossil sources that provide firm or dispatchable capacity are not the subject of this RFP and may be solicited under a separate RFP. For the purpose of this RFP, qualifying renewable energy sources are defined as wind, solar, biomass or biofuels, hydroelectric, ocean wave or ocean thermal, municipal solid waste or landfill gas, and fuel cells using renewable fuels. The goal of this RFP is to provide KIUC the ability to evaluate, select, and pursue installation of the combination of energy-only resources that best fit KIUC's needs.

The intent of this RFP is to increase KIUC's supply of renewable energy. Nine three percent (93%) of KIUC's generation is dependent on fossil fuels. KIUC seeks additional renewable sources to reduce this dependency as well as to comply with the State of Hawaii's Renewable Portfolio Standard.

KIUC will evaluate the proposals on price and non-price criteria. Selected proposal(s) will be placed on a "Candidates for Negotiation" list. Upon announcement of the "Candidates for Negotiation", KIUC will commence contract negotiations for a Power Purchase Agreement (PPA). KIUC will also consider alternative ownership options including options for KIUC to purchase the project.

### **1.1 Scope**

To comply with the State of Hawaii's Renewable Portfolio Standard (RPS), at least 20 percent of KIUC's net energy sales must be supplied by qualifying renewable resources by 2020. Table 1 lists the estimated amount and timing of renewable resources needed for compliance. KIUC is using this RFP to solicit projects to meet or exceed this requirement. The bidder may propose to fulfill all or part of the required renewable energy.

Table 1

Estimated Renewable Resources Needed to Comply with HI RPS

| Year | RPS % | Renewable Generation (MWh) |
|------|-------|----------------------------|
| 2005 | 7.0%  | 6                          |
| 2006 | 7.0%  | 728                        |
| 2007 | 8.0%  | 1,463                      |
| 2008 | 8.0%  | 2,213                      |
| 2009 | 8.0%  | 2,979                      |
| 2010 | 8.0%  | 13,713                     |
| 2011 | 8.0%  | 14,708                     |
| 2012 | 10.0% | 15,723                     |
| 2013 | 10.0% | 16,759                     |
| 2014 | 10.0% | 17,815                     |
| 2015 | 10.0% | 46,365                     |
| 2016 | 10.0% | 48,013                     |
| 2017 | 15.0% | 49,694                     |
| 2018 | 15.0% | 51,409                     |
| 2019 | 15.0% | 53,159                     |
| 2020 | 20.0% | 85,275                     |

## 1.2 Background

KIUC is the exclusive retail electric service provider for Hawaii's fourth largest island. Kaua'i is 533 square miles in size and has a population of approximately 64,000. Kaua'i's primary economic driver is tourism and receives over a million visitors annually.

KIUC is governed by a Board of Directors that consists of nine member-elected directors. The staff management team is headed by a Chief Executive Officer and includes a Chief Operating Officer and six Department Managers with functional responsibility for member services, energy production, transmission and distribution, engineering, regulatory affairs, and finance. KIUC has approximately 154 employees. As with all electric utilities in Hawaii, KIUC is regulated as to rates, construction standards, tariff rules and regulations, and reporting requirements by the Hawaii Public Utilities Commission (HPUC).

KIUC's electric system is fully integrated including power generation, transmission, and retail distribution. It is not interconnected with any of the other Hawaiian Islands' power grids. KIUC has 123 MW of generation capacity at the Port Allen and Kapaia Power Stations and 1.3 MW of hydro generation capacity on the Waiahi River. In 2004 KIUC also purchased 24,113 MWh of renewable power through three PPA's. The transmission and distribution system includes

five (5) transmission substations, five (5) primary distribution substations, approximately 161 miles of transmission line, and approximately 350 miles of distribution line.

KIUC's 33,232 residential and commercial customers purchased 455,313 MWh in 2004. The system peak demand was 76.98 MW in December 2004. Energy sales have grown at a compound annual rate of approximately 2.5% over the last five years. Energy sales are approximately 34% to residential members, 27% to small commercial members, 37% to large commercial members, and 2% for street lighting and irrigation members.

KIUC is Hawai'i's first and only consumer-owned electric power provider organized as a Consumer Association under Hawaiian statutes. Nationally, the electric cooperative utility industry consists of 930 organizations in forty-seven (47) states. Generation and transmission cooperatives (G&T's), numbering 65 utilities, supply generation capacity to 865 distribution system cooperatives that comprise the network serving approximately 16 million member-owners in 2,500 of the 3,100 counties in the United States.

### 1.3 KIUC Energy Information

|                         | 2001    | 2002    | 2003    | 2004    | 2005 (Projected) |
|-------------------------|---------|---------|---------|---------|------------------|
| Peak (MW)               | 71.1    | 72.1    | 73.5    | 77.0    | 76.2             |
| Annual Sales (MWh)      | 406,521 | 414,487 | 431,315 | 445,313 | 450,743          |
| Annual Sales Growth (%) | -3.0    | 2.0     | 4.1     | 3.2     | 1.2              |

## SECTION 2: GENERAL PROVISIONS

### 2.1 Schedule

The schedule for this RFP is shown below:

|                              |  |
|------------------------------|--|
| Dec. 2, 2005                 | Release of RFP   |
| Dec. 2, 2005 – Jan. 20, 2006 | Period for submitting general questions                  |
| Dec.16, 2005                 | Deadline for bidders to submit "intent to propose" email |
| Dec. 21, 2005                | Pre-bid conference call                                  |
| Dec. 5, 2005 – Jan. 20, 2006 | KIUC responds to general questions                       |
| Jan.27, 2006                 | Proposals due by 4:00 pm HST                             |
| Feb. 24, 2006                | Candidate(s) for Negotiation selected and notified       |

## **2.2 Intent To Propose**

By December, 16<sup>th</sup>, 2005 bidders must indicate their interest and establish themselves on KIUC's "General Question Response List" by sending an e-mail to [ideren@kiuc.coop](mailto:ideren@kiuc.coop). The e-mail subject line should read, "(company name) intends to propose SP2005-02 ". This will insure that KIUC is aware of the bidder's interest and provides general question responses to all prospective bidders on the list.

## **2.3 General Questions**

Bidders may submit questions by e-mail to [ideren@kiuc.coop](mailto:ideren@kiuc.coop) for the period indicated in the above schedule. To avoid exclusive dialog, bidders should not contact KIUC staff or Board Members to discuss this RFP. Copies of all questions and responses will be sent to all bidders included on the "General Question Response List".

## **2.4 Pre-Bid Conference Call**

A pre-bid conference call will be held at 8:00 am HST on December 21<sup>st</sup>, 2005. The conference call phone number will be e-mailed to all prospective bidders.

## **2.5 Limitations**

This RFP does not commit KIUC to award a contract, pay any costs incurred in preparing a proposal, to procure or contract for services. KIUC reserves the right to accept or reject any or all proposals, to negotiate with all qualified sources, or to cancel in part or in its entirety this RFP. KIUC also reserves the right to waive or modify minor irregularities in proposals received and to eliminate mandatory requirements.

## **SECTION 3: PROPOSAL CONTENTS**

Each proposal shall contain the following sections and minimum content. This mandatory content is requested to assure that an adequate description of the project is provided. Include all information deemed necessary to help KIUC fully understand the proposed project and benefits.

### **3.1 Cover Page**

The Cover Page shall indicate the name of the project, organization, date of the proposal, location, project title, and contact information of key project participants. The Cover Page must also include the signature of an authorized officer or agent of the respondent's company, certifying the validity of the proposal.

### **3.2 Proprietary Information**

Careful consideration should be given before confidential information is submitted to KIUC. The bidder should determine whether the information is critical for evaluating a proposal, or whether general, non-confidential information, may be adequate for review purposes. KIUC will honor, to the extent permissible by the State of Hawaii, County of Kaua'i, and Federal law, any information that the bidder submits that is identified and labeled as "Confidential" or "Proprietary". This information should include a written request to exempt it from disclosure including a written statement of the reasons why the information should be exempted.

### **3.3 Table of Contents**

The proposal shall include a table of contents and page numbers corresponding to the sections outlined.

### **3.4 Project Summary**

The Project Summary shall provide a concise description of the proposal. The summary should not exceed two pages. The summary shall include the location of the generation, technology, size, availability factor, project design, business arrangements, mode of operation, and financing sources. In addition, the summary shall include a proposed construction schedule, operational date, and required permits.

### **3.5 Technical Proposal**

The Technical Proposal section shall include:

#### **3.5.1 Generation Equipment Description**

The proposal shall describe the proposed renewable generation equipment, location of facility, and its proposed operation and maintenance schedule and expenses.

The proposal shall describe the major plant components and systems such as cooling towers, generators, civil works, boilers, and prime movers. Include the name of equipment suppliers and technical specifications. The proposal shall also include the commercial status of the technology.

### **3.5.2 Project Information Form**

The bidder shall complete all applicable portions of the Project Information Form in Appendix A. This form shall be submitted electronically as an Microsoft Excel file.

### **3.5.3 Site Description**

The proposal shall include a description of the facility site and a location map. This will include a description of the lease or ownership options in place or expected to be in place, the number of acres at the site and, as applicable, water sources, waste disposal plan, and the transmission or other infrastructure additions outside of the site boundaries.

### **3.6 License, Permitting, and Environmental Requirements**

Describe the necessary permits for building and operating the proposed project. The bidder is exclusively responsible for obtaining all federal, state, and local permits, licenses, and approvals that are required for the operation of the project and delivery of the energy.

KIUC shall be responsible for obtaining approval of the PPA from the Hawai'i Public Utilities Commission and Rural Utilities Service.

### **3.7 Project Schedule**

The proposal shall provide a schedule of key milestones including, but limited to: 1) site acquisition, 2) permitting, 3) start of construction, 4) operating date.

### **3.8 Energy Analysis**

The proposal shall provide an analysis of the projected energy production. This section shall include estimates of energy output of the project and a description of how those estimates were made. The analysis should also include:

**3.8.1** Estimates of monthly and annual energy production

**3.8.2** Station energy use and energy losses including supporting calculations.

**3.8.3** Expected annual capacity factor.

### **3.9 Fuel Supply**

For those technologies that require a fuel source (biomass, municipal solid waste, landfill gas, biofuels, etc.), the proposal shall include a fuel supply plan.

### **3.10 Interconnection Requirements**

The facilities necessary to connect to KIUC's electrical system are the responsibility of the bidder and shall comply with all applicable federal, state, county, and KIUC interconnection requirements. The bidder's project must be able to synchronize and operate in parallel with KIUC's electrical system without negative impact. The proposal shall include a description and cost estimate for the interconnection facilities.

### **3.11 Purchase Power Agreement (PPA): Term and Pricing**

The bidder may propose an energy price that is: 1) fixed for the contract length, 2) escalated at a defined rate, or 3) escalated by a specified index not closely related to oil or natural gas. Contract lengths shall be between 5 and 20 years. The bidder should provide pricing in terms of U.S. dollar per megawatt-hour (\$/MWh) and should specify the desired or required minimum and maximum energy sales on a monthly or annual basis. For eligible technologies, prices should include the impact of any production tax credits. The proposal should indicate which tax credits are assumed.

KIUC shall acquire all of the green credits, green tags and other environmental attributes associated with the power purchased from the project. Environmental attributes are defined as credits, emission reductions, offsets, or allowances resulting from avoidance of the emission of any gas, chemical, or other substance attributable to the renewable project(s) selected by this RFP.

KIUC also welcomes bidders to offer alternative ownership options including options for KIUC to purchase the project.

### **3.12 Qualifications – Organization and Personal**

This section shall include the qualifications of the project team for the proposed renewable generation facility(s).

- 3.12.1** – The project developer shall be required to demonstrate:
- a. Experience in planning, developing, constructing, and operating the renewable generation facility(s) they propose.

- b. Experience in site selection and acquisition, permitting and site design and engineering
- c. Financial viability of the proposed project.
- d. Sufficient resources, both financial and personnel, to construct and operate the renewable generation facility(s) they propose.

**3.12.2** – The bidder shall describe their experience with the proposed or similar projects. Include projects owned, developed, and/or operated by the bidder within the last ten (10) years.

**3.12.3** – The bidder shall describe their corporate/business structure, including primary and secondary businesses, the number of years in business under present name and the state where incorporated.

**3.12.4** – Project management concept with respect to the proposed tasks, including organizational and individual responsibilities for each team member.

**3.12.5** – Description of the teaming structure for the project, including the names of the key participants and each participant's involvement. Include business agreements between the bidder and the participants and the role of each team member. Include personnel involved in the resource assessment, project financing, permitting, regulatory compliance, construction, risk management, project design and engineering, maintenance and operation. Include a brief description of the relevant experience of the key individuals in each area of responsibility.

**3.12.6** – Resumes should be provided for key personnel involved in the project.

### **3.13 Performance Guarantee**

This section shall include the following:

**3.13.1** – A commercial date of operation.

**3.13.2** – Any limitations or exceptions to the commercial date of operation.

**3.13.3** – Any penalties and remedies associated with failure to meet the commercial date of operation.

**3.13.4** – Any penalties and remedies associated with failure to meet the minimum guaranteed monthly net megawatt hour energy production.

### **3.14 Proposal Format**

All proposals shall be printed on 8.5 x 11 inch paper. Pages shall be numbered and proposals should include a table of contents and be bound or stapled. Proposals shall include all the required information as outlined in Section 3.0. Respondents must submit five (5) paper copies and one (1) electronic copy by 4:00 pm Friday, January 27<sup>th</sup>, 2006. Proposals shall be clearly labeled and mailed to:

Mr. Jeff Deren  
RFP No. SP2005-02  
Kaua'i Island Utility Cooperative  
4462 Pahee Street, Suite 1  
Lihue, HI 96766-2032

### **SECTION 4: EVALUATION PROCESS**

KIUC will review every proposal meeting the minimum requirements specified in Section 3.0 of this RFP. Proposals meeting these requirements will be evaluated on the price and non-price criteria specified below. KIUC may need additional information from the bidder to complete a full evaluation. KUC will request the additional information in writing. The bidder must provide KIUC the necessary information by the date requested to be further considered.

### **SECTION 5: EVALUATION CRITERIA**

KIUC may utilize weighted price and non-price criteria to evaluate the proposals. KUC reserves the right to amend these criteria without notice. KIUC anticipates the evaluation criteria to include but limited to:

- Price
- Evidence of site control
- Fuel supply plan (if applicable)
- Quality and experience of the development team
- Financial resources of the bidder
- Environmental and social impacts

### **SECTION 6: CONTRACT AWARD**

Upon completing the review and evaluation, KIUC will select the Candidates for Negotiation and notify all bidders whether or not they have been selected. KIUC will begin PPA contract negotiations with those bidder(s) whose proposal(s) are selected.