

Hawaiian Electric Soft Launch NWA RFP

Form Contracts

October 28, 2019

Agenda

- Overview of the RFP
 - Schedule
 - Updates
 - Scope
- Contract Forms
 - Scheduled and Contingency Capacity Purchase Agreement (SCCPA)
 - Grid Services Purchase Agreement (GSPA)
- Q&A / Discussion / Feedback



Soft Launch RFP Overview

- Seeking proposals for qualified non-wires alternatives ("NWA") to provide Reliability (back-tie) Services for the East Kapolei Area Distribution System
- This RFP is a product of the IGP Soft Launch as described in the IGP Workplan.
- Soft Launch RFP is intended to demonstrate the sourcing processes and evaluation methods for distribution NWAs.
- Soft Launch will help inform development of the full scale IGP planning and sourcing effort beginning in 2020.



Soft Launch RFP Overview

Seeking a 5-year service contract between 2023-2027 for Ho'opili

- Due to load growth expected in each year between 2023-2027, to simplify the procurement and evaluation the Company will procure the MW and duration associated with the 2024 forecast.
- ◆ The Companies will continue to evaluate in future years whether additional services will be needed to accommodate additional load growth prior to 2027

Approximate Value of the Distribution Reliability (back-tie) Services:

• The estimated value of the Reliability (back-tie) Service is based on deferring the traditional solution for five years. This is calculated by converting the capital cost of the traditional solution into annual revenue requirements using a levelized deferral rate.

Approximate 5-Year Value of the Distribution Reliability (back-tie) Service:

- Kapolei 4 Circuit Extension: \$2.3M NPV
- Ho'opili Substation Transformer #1 and #2: \$3.9M NPV



Soft Launch RFP Overview - Updates

- Stakeholder comments received on October 1.
- Final Draft will be responsive to comments
- Company in the process of hiring an Independent Observer to oversee the RFP process and evaluation.



Soft Launch RFP Overview – Schedule

Milestone	Schedule Dates
Draft RFP Circulated to Stakeholders	September 3, 2019
Stakeholder Comments Due	October 1, 2019
Model SCCPA Circulated	October 11, 2019
Comments on SCCPA Due	October 21, 2019
Contracts Technical Conference	October 28, 2019
RFP is Issued	November 1, 2019
Proposal Due Date	December 31, 2019 at 2:00 pm
	HST
Selection of Final Award Group	March 2, 2020
Contract Negotiations Start	March 9, 2020



Soft Launch RPF Overview – Dispatch Options

Two Dispatch Options

- Option A, Automatic Dispatch
 - Solution must reach full output within 12 seconds of the contingency event
 - Examples of this could be SCADA with Direct Transfer Trip for automatic activation
- Option B, Scheduled Dispatch
 - Pre-scheduled for delivery times
 - Solution must reach full output at the start of the delivery time



Soft Launch RPF Overview – Other Technical Aspects

RFP distinguishes between "demand-side" resources and "inverter-based" resources

- Demand based resources (i.e., EE, flexible loads, etc.) will seamlessly transfer and reduce loads during an auto-transfer of a circuit to its back-up circuit
- Inverter based resources, due to the 5-minute, anti-islanding feature, upon transfer inverter-based resources will be disconnected from the grid for at least 5 minutes while the load transfers during a contingency within 12 seconds. Therefore, a piece of equipment may be severely overloaded during the duration at which the inverter-based resource is unable to reduce the load.
- Appendix J and Section 2.1 discuss this issue
- The different type of resources will be considered in the evaluation (discussed later in this presentation).



Contract Forms

- For purposes of Soft Launch, using contract forms similar to existing model contracts
 - RDG PPA
 - GSPA
- RDG PPA adapted for distribution level capacity
 - Scheduled and Contingency Capacity Purchase Agreement ("SCCPA")
 - Guaranteed net instantaneous output instead of availability
- GSPA updated
 - Added Distribution Services
 - Reliability (back-tie) Service (Same as Option A, Automatic Dispatch)
 - Distribution Capacity (Option B, Scheduled Dispatch)
 - Updated Customer Incentives & Liquidated Damages for Distribution Services



Overview of SCCPA

- Circulated to Stakeholders on October 11, 2019
- For Generation paired w/ storage or Standalone Storage
- Commercial Terms: based on Stage 2 RFP Model RDG PPA for PV+Storage
- Fully negotiable
- Compensation: Lump sum payment in exchange for providing the contracted service
- Liquidated damages assessed if the project fails to provide the contracted services as and when required under the SCCPA



SCCPA – Key terms and differences from the RDG model

Performance Requirement

- Facility required to provide a net instantaneous output of not less than a guaranteed MW amount
- Guaranteed net instantaneous amount will be as specified in the Guaranteed Daily Profile provided in the Proposer's Response to RFP.

Payment Process

- No energy payment, only Lump Sum Payment
- No payment for energy taken from the grid for charging project storage
 - Charging from the grid in excess of the Monthly Charging Maximum results in liquidated damages
- <u>Scheduled Option Projects</u> required to provide the guaranteed net instantaneous output each day for the duration of the Service Period specified for such Project in the Proposer's Response to RFP (for example, from 10 a.m. to 2 p.m.).
- Contingency Option Projects are required to begin providing the guaranteed net instantaneous output upon occurrence of any Contingency Event during the Scheduled Window for such Project, and to continue providing the guaranteed net instantaneous output for the shorter of (i) the duration of the Contingency Event or (ii) the expiration of such Project's Scheduled Window.



SCCPA – Key terms and differences from the RDG model

- RDG PPA requires the Facility merely to be available to respond to Company dispatch (with liquidated damages assessed for lack of availability)
- SCCPA requires the Facility to actually provide a guaranteed net instantaneous output during the periods specified in the SCCPA (with liquidated damages assessed for failing to provide the requisite output).
- SCCPA allows the Facility's BESS to charge from the grid during specified hours, subject to interruptions
 by the Company System Operator for grid conditions such as energy shortage



Next Steps

RFP to be issued on November 1, 2019

RFP will include an IO to monitor the process

Power Advocate portal to be opened soon

- To submit proposals
- To ask questions

