Sedway Consulting, Inc.

INDEPENDENT OBSERVER REPORT FOR HAWAIIAN ELECTRIC'S 2019 REQUEST FOR PROPOSALS FOR NON-WIRES ALTERNATIVES TO PROVIDE RELIABILITY (BACK-TIE) SERVICES FOR THE EAST KAPOLEI AREA

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Introduction and Background

On November 8, 2019, Hawaiian Electric Company, Inc. (Hawaiian Electric) issued its 2019 Request for Proposals for Non-Wires Alternatives (NWAs) to Provide Reliability (back-tie) Services for the East Kapolei Area (IGP Soft Launch). In accordance with the State of Hawai‘i Public Utilities Commission (PUC) Order 36218 issued on March 14, 2019 (Accepting the IGP Workplan and Providing Guidance) as part of Docket No. 2018-0165, the purposes of the IGP Soft Launch were to:

1) Solicit NWAs for the East Kapolei area to defer wires investments at the Ho‘opili Substation and Kapolei 4 Circuit by mitigating normal overloads and providing reliability (back-tie) services, and

2) Demonstrate the sourcing processes and evaluation methods for distribution NWAs with the goal of informing development of the full scale IGP planning and sourcing effort.

Hawaiian Electric's IGP Soft Launch sought NWAs to meet the following requirements to defer distribution investments at two locations:

<u>Kapolei 4 Circuit Extension Deferral Opportunity</u>

3.5 MW of reliability (back-tie) services at the Kapolei 2 transformer needed January through December with delivery hours of 5pm-11pm starting February, 2022 and needed a maximum number of 365 days per year.

<u>Ho‘opili Substation Deferral Opportunity</u>

a) Needed distribution capacity of:

   i) 4.7 MW at the Kaloi 1 transformer available January through December with delivery hours from 1pm-11pm starting January, 2023 and needed a maximum number of 365 days per year, and

   ii) 0.3 MW at the Kaloi 3 circuit available August through October from 7pm-9pm starting August, 2023 and needed a maximum number of 69 days per year.

b) Needed reliability (back-tie) services needed January through December of:

   i) 3.5 MW at the Kapolei 2 transformer with delivery hours of 5pm-11pm starting February, 2022 and needed a maximum number of 365 days per year;

ii) 5.1 MW at the Ewa Nui 2 circuit with delivery hours of 11am-12am (i.e., 13-hour duration) starting January, 2023 and needed a maximum number of 365 days per year;

iii) 9.7 MW at the Kaloi 1 transformer with delivery hours of 6am-8am and 9am-12am (i.e., 17-hour duration) starting January, 2023 and needed a maximum number of 365 days per year;

iv) 2.6 MW at the Kaloi 3 circuit with delivery hours of 5pm-11pm starting January, 2023 and needed a maximum number of 365 days per year; and

v) 1.0 MW at the Kamokila 4 circuit with delivery hours of 5pm-10pm starting May, 2023 and needed a maximum number of 226 days per year.

Both deferral opportunities assumed that the distribution investments could be deferred up to 5 years.

For the Ho‘opili Substation, the Distribution Capacity needs at the Kaloi 1 transformer and Kaloi 3 circuit could both be met by meeting the reliability needs at those two locations. For example, a 9.7 MW NWA at the Kaloi 1 transformer would meet both the distribution capacity and reliability needs for that location. Similarly, a 2.6 MW NWA at the Kaloi 3 circuit would also meet both the distribution capacity and reliability needs for the Kaloi 3 circuit.

In addition, an NWA at one location had the potential to reduce the need at other locations. For instance, a solution at the Ewa Nui 2 circuit had the potential of reducing a portion of the needs at the Kaloi 1 transformer, Kaloi 3 circuit, and Kamokila 4 circuit.

Bidders were allowed to provide Behind the Meter (BTM) or In-Front of the Meter (IFTM) proposals in 50 kW increments and 2-hour increments up to the RFP needs. Therefore, the RFP sought proposals that either (a) met the entire need on their own, or (b) met a portion of the need where they might be combined with other “partial” proposals into cost-effective portfolios that would defer the distribution system improvements.

Any new solution or “add on” to an existing solution could be eligible in the RFP, regardless of technology type, as long as it met the following requirements:

- the solution could not be paid more than once for services it already provided to the grid and already accounted for in load and DER forecasts (i.e., no double counting),

- repurposed solutions must not adversely affect the grid, meaning that if the solution was called for one service, it must still be available to meet other requirements for which it was contracted or paid,

- the project could not be a utility-scale generation project currently under contract, including those under the feed-in tariff, and

- bidders of energy efficiency projects could not receive rebates as participants in this RFP.

Table 1 lists the schedule followed in the RFP:

Table 1
Hawaiian Electric IGP Soft Launch RFP Schedule

RFP issued	November 8, 2019
Prerecorded webinar conference	November 15, 2019[1]
Proposal due date	January 7, 2020
Deadline for IO to receive proposal files	January 8, 2020
Debriefing sessions	Early March

Role of the Independent Observer

The role of the Independent Observer (IO) in the IGP Soft Launch is adapted from PUC Order 23121 approving the IGP Workplan which stipulates when an IO is required and the IO's obligations. In November 2019, in compliance with this order and in coordination with the IGP Distribution Planning Working Group, Hawaiian Electric retained Sedway Consulting, Inc. (Sedway Consulting) as an IO to monitor Hawaiian Electric's IGP Soft Launch RFP. Sedway Consulting has served as an independent observer/evaluator in numerous utility distribution deferral solicitations in recent years, evaluating NWA offers for over two dozen project locations. Thus, Sedway Consulting was in a position to provide insights from these other project experiences to help Hawaiian Electric's IGP Soft Launch RFP be as successful as possible and/or yield possible suggestions for improvements in future NWA RFPs.

As described on Page 12 of the RFP, the role of the IO is to monitor all steps in the solicitation process and ensure that the RFP is undertaken in a fair and unbiased manner. Sedway Consulting was provided access to all appropriate materials. Sedway Consulting reviewed Hawaiian Electric's RFP documents, outreach efforts, evaluation processes, modeling methodologies, communications with bidders, and evaluation and selection results.

Members of the IO team:

[1] The actual date that the pre-recorded webinar was provided on Hawaiian Electric's IGP website was delayed by a few days due to technical difficulties.

- reviewed the RFP documents prior to their issuance.
- listened to Hawaiian Electric's Prerecorded Webinar Conference,
- reviewed email exchanges between potential Proposers and Hawaiian Electric,
- discussed evaluation methods and processes with Hawaiian Electric,
- anchored all evaluation assumptions prior to the receipt of proposals,
- reviewed estimated deferral values for the targeted distribution system upgrades,
- received all bid information directly from Proposers,[2]
- performed an independent review and evaluation of proposals,
- conferred with Hawaiian Electric on the evaluation results,
- coordinated with Hawaiian Electric on approaching Proposers for debriefing sessions about the RFP,
- coordinated with PUC staff on monitoring results and providing necessary details during each stage of the RFP,
- by way of this report, provided an overall assessment of the RFP, and
- participated in all debriefing and IGP Working Group calls in which the RFP process was discussed and feedback was solicited.

Pre-Proposal-Submission: IO Findings and Recommendations

Sedway Consulting believes that Hawaiian Electric pursued reasonable and adequate procedures for notifying potential interested parties. Specifically, Hawaiian Electric dedicated a section of its company website to the solicitation, providing a means for interested parties to download the RFP instructions and related materials. On the RFP launch date of November 8, 2019, Hawaiian Electric notified approximately 180 market participants via Hawaiian Electric's email distribution list (compiled from previous power supply solicitations, regulatory service lists, etc.) that the RFP had been released and invited them to participate.

Within the set of RFP documents that were issued, Hawaiian Electric provided an Excel workbook where bidders with BTM resources could input the size and prices for their proposals directly by requirement, month, and customer type. Input prices included Management prices in $/kW-mo, enablement prices in $/kW, and incentive prices in $/kW-mo. The workbook also included an incentive adder of $2/kW-mo.

[2] Bidders were instructed to provide physical delivery of a USB thumb drive with their offer materials to Sedway Consulting for receipt no later than one business day following the deadline for uploading such materials to Hawaiian Electric's web-platform. This ensured that the IO had materials directly from each bidder and allowed Sedway Consulting to ensure that what had been uploaded to Hawaiian Electric was indeed what each bidder had intended to submit.

For IFTM proposals, there was no Excel workbook for proposal submission. Instead, Hawaiian Electric provided a Proposal Summary Table (in the RFP's Appendix B, pages B-5 through B-6) which included a list of information needed for the proposal. This list included lump-sum pricing information in $/year and capacity and energy offered.

IO Recommendation #1: IFTM offer workbook. For consistency sake in future NWA RFPs, Sedway Consulting encourages Hawaiian Electric to consider providing a spreadsheet pricing and operating parameters template for IFTM resources too. It has been a general practice in other utility solicitations that Sedway Consulting has overseen that the RFP documents include spreadsheet pricing templates for whatever product types are being solicited. This helps avoid bidder confusion and potential inconsistencies in data submission.

Hawaiian Electric requested bidders to provide $/year, $/kW, and/or $/kW-month fixed pricing. Many NWA products have variable costs (i.e., $/MWh expenses associated with actual delivered energy or load reduction). Because of this, in other NWA solicitations, Sedway Consulting has seen utilities allow for both fixed and variable pricing for offers. This allows a bidder to propose fixed charges that are based on their project development and installation costs and variable charges that reflect costs associated with each dispatch request (e.g., energy charging costs or degradation effects for battery systems). Relying only on a fixed charge structure forces a bidder to assume the highest-use scenario (i.e., maximum number of calls/year) and price all of the variable costs of that scenario into its proposed fixed charge. If indeed the utility truly expects to call on the NWA product for the maximum number of dispatches in each year of the contract, there is no need to bifurcate charges into fixed and variable components. However, if there is a chance that lower-use scenarios may arise, a contract structure with a variable price component will yield savings for utility customers.

IO Recommendation #2: Variable Pricing. Sedway Consulting recommends that Hawaiian Electric consider adding a $/MWh variable cost component to its NWA offer/contract structure in future NWA RFPs.

Receipt and Evaluation of Proposals

On January 7, 2020, Hawaiian Electric received proposals through the Power Advocate platform, with Sedway Consulting receiving proposals directly via flash-drive a day after that deadline, as requested in the RFP instructions.

Both Hawaiian Electric and Sedway Consulting performed parallel Initial Evaluations[3] and determined that the proposals received did not include enough capacity to meet either the Kapolei 4 circuit extension or Hoʻopili Substation needs.

Sedway Consulting reviewed and discussed the proposals with Hawaiian Electric and agreed that there was insufficient capacity (by a large margin) to justify continuing with the RFP process. Details of the proposal information are not public, but this report includes a confidential appendix that provides proposal pricing, quantity, and seller identity information.

Sedway Consulting participated in discussions with Hawaiian Electric (and later with the Distribution Planning Working Group participants and the PUC) that culminated with Hawaiian Electric's formal decision not to shortlist any proposals. Debriefing calls to solicit feedback from bidders and other stakeholders were pursued. Sedway Consulting encouraged Hawaiian Electric to cast as wide a net as possible, emailing its request for feedback from everyone on the original RFP launch email distribution list (and not just those entities that had registered on PowerAdvocate).

Sedway Consulting concluded that Hawaiian Electric administered its evaluation and selection process fairly. The fact that Sedway Consulting conducted a parallel, independent bid receipt and evaluation process allowed it to confirm Hawaiian Electric's results and verify that there was an insufficient response that did not yield enough offered capacity to address either the Kapolei 4 Circuit Extension or the Hoʻopili Substation needs. Sedway Consulting concurred with Hawaiian Electric's final decision to discontinue the RFP efforts and move ahead with the distribution system investment projects.

Post-Proposal-Submission: IO Findings and Recommendations

Sedway Consulting concluded that Hawaiian Electric's evaluation design and administration was unbiased and fair. The process was designed to treat all bidders fairly, employing a consistent methodology that did not favor or disadvantage any bidder or product.

[3] Hawaiian Electric's RFP included procedures for completing an Initial Evaluation and a subsequent Detailed Evaluation. Since the Initial Evaluation determined that not enough capacity was proposed to meet the RFP requirements to defer either the Kapolei 4 Circuit Extension or the Hoʻopili Substation upgrades, the Detailed Evaluation stage proved to be unnecessary.

Sedway Consulting was copied on all email communications with bidders and ensured that consistent information was being provided to all. Sedway Consulting participated in all debriefing calls and concluded that Hawaiian Electric treated all participants consistently and fairly.

Given Sedway Consulting's activities with this RFP, the information the IO received from the debriefing calls, and insights from its experience in other utility NWA RFPs, Sedway Consulting offers up the following recommendations for potential improvements for Hawaiian Electric's future NWA RFPs:

IO Recommendation #3: Timing of offer submission. If possible, it could be beneficial if the schedule for the annual IGP process was adjusted to accelerate the launch of the RFP and make the proposal submission deadline in early or mid-November, before the holidays.

As seen in Table 1, Hawaiian Electric issued the IGP Soft Launch RFP on November 8, 2019 with a proposal due date of January 7, 2020. Thus, bidders had to perform their research and prepare their proposals over the end-of-year holiday period – a time of year when many firms ramp down as many employees leave for Thanksgiving and December holiday breaks. This timing may have made it hard for some bidders to compile and submit proposals. Sedway Consulting understands that Hawaiian Electric's IGP process involves several stages, internal departments, and stakeholders, so it may be difficult to move the due date of future IGP solicitations. However, if possible, moving the proposal submission date away from the holiday period may help increase participation and the likelihood that sufficient cost-effective NWA capacity is offered.

IO Recommendation #4: Refinement of screening criteria for deferral opportunities. Identifying upcoming distribution system upgrades that may be appropriate candidates for deferral with NWA resources is a challenging process, but Hawaiian Electric may want to focus on those with shorter need durations (i.e., the span of hours per day) and fewer calls per year.

The NWA needs in Hawaiian Electric's IGP Soft Launch RFP were for fairly long durations – as long as 17 hours per day for the Kaloi 1 transformer need of the Hoʻopili substation. In addition, for both Hoʻopili and Kapolei 4, most of the needs were for 365 days per year. In Sedway Consulting's experience, it is difficult for NWA resources to cost-effectively provide generation or load reductions for such long daily periods and for every day of the year. For future NWA RFPs, Hawaiian Electric may want to focus on locations where the need durations are shorter and the call frequencies are less.

IO Recommendation #5: Longer deferral period. Hawaiian Electric's IGP Soft Launch RFP sought NWAs that could defer distribution system investments up to five years. Longer deferral periods (i.e., with the investments pushed out further) naturally result in greater deferral savings. And given longer contract periods over which to recover development and project capital costs, NWA bidders can often provide lower

$/kW-month prices. Although Sedway Consulting recognizes that there are challenges (e.g., localized load forecasting uncertainty) associated with longer deferral periods, the IO recommends that Hawaiian Electric give some consideration in future NWA RFPs to identifying distribution system upgrade projects where longer deferral periods may be applicable. For example, in other utility NWA RFPs, Sedway Consulting has seen deferral periods of seven years.

IO Recommendation #6: Simplification of RFP document(s). Sedway Consulting found Hawaiian Electric's RFP materials to be quite comprehensive. However, sometimes less is more, and Sedway Consulting recommends that Hawaiian Electric explore ways to reduce and streamline its RFP documents. If solicitation materials are too voluminous and exhaustive, they may deter bidder participation because there is too much for bidders to digest and ensure their proposals will be compliant with all RFP requirements. Particularly because NWA RFPs tend to be for fairly small amounts of capacity (and thus for modest total contract costs), it is important to keep the administrative and proposal preparation efforts as light as possible.

In other NWA RFPs that Sedway Consulting has overseen (and which have successfully resulted in the procurement of NWAs), the main RFP document has been a couple dozen pages, with less than a half dozen supplemental documents (e.g., offer pricing spreadsheet, load forecast and customer data, confidentiality agreement, etc.)

Again, Sedway Consulting recognizes the benefits of the comprehensiveness and transparency of the IGP Soft Launch RFP materials that were provided to potential bidders. However, it is important to strike a balance between too little and too much, and Sedway Consulting believes that Hawaiian Electric's RFP would benefit from some simplification and streamlining.

IO Recommendation #7: Redlined power purchase agreement (PPA). Hawaiian Electric's IGP Soft Launch RFP required bidders to review a full pro forma contract and submit a redlined version that displayed what they would seek to revise if shortlisted. While there are some benefits for the utility and IO evaluation teams to having such a redline provided at the outset, it is a significant undertaking and legal expense for a bidder that may discourage participation in the RFP. Sedway Consulting recommends that Hawaiian Electric consider issuing a simplified term sheet with future RFPs and require bidders to redline or comment on that document, with formal redlining of a full contract being required if and only if a bidder is selected to the Priority List (i.e., shortlisted). A redlined term sheet could save bidders significant time and money while identifying most areas where changes to the contract would impact the proposal evaluation. The full contract redline requirement at shortlisting is a procedure that Sedway Consulting has seen adopted successfully by other utilities.

IO Recommendation #8: Other services. Often NWA products can provide other services – beyond the specific distribution capacity or reliability back-tie services – that may be beneficial to Hawaiian Electric. Sedway Consulting recommends that Hawaiian

Electric consider procuring and valuing these other services. Sedway Consulting has seen some utilities focus only on procuring the distribution service product in their NWA RFPs while others have been open to procuring system capacity, energy, and ancillary service products, if available, from NWA projects. In the latter instance, this relieves the NWA bidder from having to monetize these benefits themselves. In the former case, NWA bidders are expected to minimize their distribution capacity prices after identifying other potential revenue streams from other offtakers. However, given that there are no other offtakes in Hawaiian Electric's service territory, this is not possible. In any case, the idea of multi-product procurement deserves some more thought.

IO Recommendation #9: Exporting energy from BTM resources. For BTM resources, the question of whether a storage or generation source can output more than on-site customer load (and thus export to the grid at times) is a complicated one and often depends on a utility's tariffs and/or interconnection requirements. It is not always easy for a BTM bidder to navigate these tariffs/requirements. Sedway Consulting notes that Hawaiian Electric provided significant detail regarding allowable exports in the RFP's Appendix I but, in future RFPs, encourages Hawaiian Electric to either move this information into the main RFP document and/or highlight it in the bidder webinar presentation.

Overall, Sedway Consulting believes that Hawaiian Electric did a good job in designing and administering its 2019 IGP Soft Launch RFP. The above IO recommendations are fairly minor and are merely suggestions for potential improvements and lessons learned for future NWA RFPs.

Conclusion

Sedway Consulting believes that Hawaiian Electric conducted a fair solicitation and evaluation of the proposals received in response to its 2019 IGP Soft Launch RFP.

Sedway Consulting was provided access to all necessary materials and was able to parallel Hawaiian Electric's process with its own evaluation of the proposals. Sedway Consulting conferred with Hawaiian Electric on the results and agreed with the decision not to shortlist any counterparties.

Sedway Consulting monitored the back-and-forth email traffic between Hawaiian Electric and all counterparties and believes that Hawaiian Electric treated everyone consistently and fairly. Sedway Consulting concludes that Hawaiian Electric made appropriate and fair decisions in its IGP Soft Launch RFP.