

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
)
 HAWAIIAN ELECTRIC COMPANY, INC.)
)
 To Modify its Rule 14 to Establish)
 Interconnection Standards and to)
 Require an Interconnection)
 Agreement for Distributed)
 Generating Facilities.)
 Transmittal No. 02-01.)

DOCKET NO. 02-0051
(CONSOLIDATED)

In the Matter of the Application of)
)
 HAWAII ELECTRIC LIGHT COMPANY, INC.)
)
 To Modify its Rule 14 to Establish)
 Interconnection Standards and to)
 Require an Interconnection)
 Agreement for Distributed)
 Generating Facilities.)
 Transmittal No. 02-02H.)

In the Matter of the Application of)
)
 MAUI ELECTRIC COMPANY, LIMITED)
)
 To Modify its Rule 14 to Establish)
 Interconnection Standards and to)
 Require an Interconnection)
 Agreement for Distributed)
 Generating Facilities.)
 Transmittal No. 02-01M.)

DIV. OF CONSUMER ADVOCACY
DEPT. OF COMMERCE AND
CONSUMER AFFAIRS
STATE OF HAWAII

2002 NOV 15 P 4: 16

RECEIVED

ATTEST: A True Copy
KAREN HIGASHI
Chief Clerk, Public Utilities
Commission, State of Hawaii.

K. Higashi

DECISION AND ORDER NO. 19773

Filed NOV. 15, 2002
At 11:00 o'clock A .M.

Karen Higashi
Chief Clerk of the Commission

(collectively, "utilities"), by their respective transmittals, seek to establish interconnection standards and a standard interconnection agreement for distributed generating facilities operating in parallel with the utility's respective electrical systems. The utilities propose to adopt interconnection standards and a standard interconnection agreement by modifying their respective Rule 14 tariff to include a new paragraph H.

The utilities make their requests in accordance with Hawaii Revised Statutes (HRS) §§ 269-12 and 269-16 and Hawaii Administrative Rules (HAR) § 6-61-111.

Copies of the applications and attachments thereto were served on the Department of Commerce and Consumer Affairs, Division of Consumer Advocacy (Consumer Advocate). By Order No. 19231, filed on March 4, 2002, the commission consolidated the three transmittals into the instant docket.

On March 21, 2002 and April 10, 2002, the utilities jointly responded to the Consumer Advocate's first and second sets of information requests, respectively. On May 16, 2002 and September 4, 2002, the Consumer Advocate submitted comments and proposed revisions to the utilities.

Subsequently, by letter dated September 23, 2002, the utilities and Consumer Advocate (collectively, "parties") jointly submitted for commission review and approval their agreed upon: (1) modifications to Rule 14, consisting of a paragraph H; (2) interconnection standards (Appendix I to Rule 14); (3) standard interconnection agreement (Appendix II to Rule 14); and (4) interconnection procedures (Appendix III to Rule 14) (collectively, "joint submission").

The parties state that the joint submission is reasonable, and the utilities request an effective date of November 15, 2002, "unless the Commission sets or approves an alternative effective date."

The instant decision and order reviews whether the parties' joint submission is just and reasonable, in accordance with HRS § 269-16.

II.

A.

Rule 14, entitled "Service Connections and Facilities on Customer's Premises," presently consists of seven paragraphs, A - G. The parties agree to add a paragraph H, entitled "Interconnection of Distributed Generating Facilities Operating in Parallel with the Company's Electric System." This new paragraph H incorporates by reference the utilities' interconnection standards (Appendix I); interconnection agreement (Appendix II); and interconnection procedures (Appendix III).

The utilities state that the interconnection standards (Appendix I) are based in part on: (1) guidelines and codes from various national sources; and (2) certain requirements implemented by other state commissions where standardized interconnection agreements were adopted for distributed generation units.¹ In addition, the standard interconnection agreement (Appendix II) is based in part on standard terms and conditions: (1) set forth in existing power purchase agreements

¹Specifically, the: (1) California Public Utilities Commission; (2) Public Utility Commission of Texas; and (3) New York State Public Service Commission.

and a national industry source; and (2) adopted by other state commissions.²

B.

Appendix I sets forth comprehensive interconnection standards and technical requirements that are intended to facilitate the interconnection and parallel operation of a customer's distributed generating facility with the utility's electrical system. The underlying purposes of the technical interconnection requirements are to: (1) maintain safety, reliability, and power quality and restoration; (2) protect the utility's and customer's equipment and facilities; and (3) advance the operating efficiencies of the utility's electrical system.

In general, the interconnection standards and technical requirements consist of: (1) a definitions section; (2) general interconnection guidelines; (3) design requirements; (4) operating requirements; (5) technology specific requirements; (6) protection, synchronizing, and control requirements; and (7) schematic diagrams illustrating "typical equipment and protective device requirements for large synchronous, induction, and inverter generators."

C.

Appendix II sets forth the standard interconnection agreement (agreement) between the utility and its customer.

²See footnote 1, supra.

1.

Customers with on-site distributed generating facilities that are intended to operate in parallel with the utility's electrical system must execute and complete the agreement. Distributed generating facilities may be interconnected and operated in parallel with the utility's electrical system, in accordance with the standard terms and conditions of the agreement. At the customer's request, the agreement may be modified by the utility to make both the customer and a third-party that is the owner, operator, or both, of the distributed generating facility, parties to the agreement.

The agreement will not apply to a customer that enters into: (1) a power purchase agreement for the sale to the utility of energy generated by the distributed generating facility; or (2) a standard contract providing for net energy metering, pursuant to the utility's Rule 18 tariff.

2.

The utility agrees to furnish, install, operate, and maintain interconnection facilities on its side at the point of interconnection with the customer's facility, as required for the utility's parallel operation with the customer's facility. In consideration thereto, the customer agrees to pay: (1) a non-refundable contribution for the utility's investment in its interconnection facilities; and (2) the associated interconnection costs.

The utility and customer will install, operate, and maintain their respective equipment and facilities in accordance

with: (1) good engineering practice in the electric industry; and (2) the applicable laws, rules, orders, and utility's tariff.

The agreement includes: (1) cross-indemnification provisions between the utility and its interconnecting customer; and (2) an insurance provision, requiring the customer to maintain a commercial general liability policy that "will protect the Customer and the Company with respect to the Facility, the Facility's operations, and the Facility's interconnection with the Company's system[.]"³

The agreement: (1) shall take effect "upon execution by the two parties;" (2) will remain in effect for an initial period of one-year; and (3) will continue in effect from month-to-month thereafter, unless terminated by either party upon 30 day's prior written notice.

D.

Appendix III outlines the interconnection steps and procedures a customer should follow in seeking to interconnect with HECO, HELCO, or MECO. In general, these steps include the: (1) interconnection process; (2) technical review process; (3) additional technical study, if required; and (4) a dispute resolution process, if applicable, including alternative dispute resolution procedures or seeking guidance from the commission.

³The policy must cover bodily injury and property damage, with a combined single limit "for any occurrence," as designated in the agreement, based on the nameplate rating of the customer's generator.

III.

Where feasible and beneficial, the commission encourages and endorses the development and use of distributed generation facilities in the State of Hawaii (State). Such development and use will provide a meaningful choice for customers. As noted by the Public Utility Commission of Texas:⁴

Distributed resources benefit the state by adding more competitive options, potentially reducing customer energy, improving the asset utilization of [transmission and] distribution systems, firming up reliability, and improving customers' power quality.

In order to facilitate the development and use of distributed generation in the State, the commission, at the outset, makes the following observations with respect to the utilities' proposal.

A.

Rule 14(H)(2)(a), as proposed, requires existing customers with on-site distributed generating facilities to execute an agreement with the utility within 60 days following the effective date of Rule 14(H). The utilities' response to CA-IR-1 lists the affected customers that are already operating in parallel with a utility's electrical system, and thus, will be subject to the proposed 60-day requirement. Presently, none of these existing customers have executed an agreement with HECO, HELCO, or MECO.

In the commission's view, the 60-day requirement imposes an undue time constraint on these existing customers, since it may require such customers to consent to the utility's

⁴Distributed Generation Interconnection Manual, dated May 1, 2002, at 1-1.

requirements within a 60-day time frame. Instead, a one-year timeframe is suggested as a more reasonable option.

Furthermore, the utilities should strongly consider whether it is reasonable and technically feasible to exempt such customers that are already operating in parallel with the utility's system, from the potential need for additional technical studies currently proposed by the joint submission. In essence, it appears that a grandfather provision should apply to such customers, to the extent applicable.

B.

The commission expresses concern with the constraints implied by the one-year contractual term set forth in Appendix II, paragraph 15, of the agreement. Such a limitation may appear to: (1) discourage a customer's capital investment in new distributed generating facilities; and (2) minimize the return on a customer's capital and interconnection costs. Interconnection contracts of other jurisdictions do not appear to incorporate term limits, nor do such contracts allow the utilities to terminate these contracts, absent just cause.

C.

Appendix III, section 4, sets forth dispute resolution procedures in two areas. Specifically, if there is a dispute as to: (1) whether additional technical study is required (prior to interconnection), or as to the scope and cost of the study; and (2) the need for interconnection equipment, protective devices, or control systems.

If a dispute exists, section 4 outlines the in-house procedures the utilities, in general, will follow, culminating in the filing of a written request with the commission, by either the customer or utility, seeking to resolve the matter in dispute. In response thereto, the utilities should make clear that: (1) the customer, at any time during the interconnection process, has the option of seeking the commission's assistance or guidance, via the complaint process;⁵ and (2) the filing of a complaint will not stay the negotiations between the utility and customer.

D.

The proposed tariff requires the utilities to perform certain tasks within 5 or 15 business days, but not others.⁶ While it may appear difficult, at the onset, for the utilities to determine the amount of time needed to finalize a particular

⁵See HAR chapter 61, subchapter 5.

⁶Specifically:

1. Pursuant to Appendix III, section 1(c), step 1, copies of Appendices I, II, and III will be transmitted to the customer within 5 business days after receiving the customer's request;
2. Pursuant to Appendix III, section 2(c), the utility will perform an initial technical screening of the distributed generated facility's impact on the utility's electrical system, and the utility must submit its findings to the customer within 15 business days; and
3. Pursuant to Appendix III, section 4, as part of the fourth step of the dispute resolution process, the utility must respond in writing to the customer's position within 15 business days.

Under scenario 2 or 3, the utility reserves the right to modify the applicable time limit upon good cause.

agreement, the utilities are encouraged to establish reasonable targeted time periods for the numerous steps of the interconnection process.

The adoption of target dates is consistent with the interconnection procedures established in other jurisdictions. Facilitation is encouraged, while at the same time, ensuring the reliability, safety, and integrity of the utility's electrical system.

E.

The utilities are urged to continuously review and monitor the customer interconnection requirements set forth in the joint submission, to determine whether it is technically feasible to deploy less stringent customer requirements. As an example, pursuant to Appendix III, section 3(a), the need for additional technical study may be triggered by feeder penetration of greater than 10 per cent. By contrast, other jurisdictions set the penetration threshold at 15 per cent.⁷ Furthermore, the technical review/screening process in other jurisdictions appears less restrictive.

The commission is optimistic that, in the future, a more streamlined interconnection process will result.

IV.

A.

Upon careful review, the commission finds that the parties' joint submission, taken as a whole, appears reasonable,

⁷See footnote 1, supra.

subject to: (1) any revisions made as a result of the parties' review and consideration of the commission's observations; and (2) the reporting requirements set forth below.

B.

The utilities, individually, shall submit to the commission and Consumer Advocate the following reports:

1. By December 31, 2002, and by the end of each quarter thereafter, a report detailing the status of establishing an agreement with each existing customer, until such time that all such agreements have been finalized and executed.

2. By December 31, 2002, and by the end of each quarter thereafter, a status report describing all disputes: (A) with a running summary of the factors that have been a basis for the disputes; and (B) the time needed, from start to finish, to resolve each dispute, along with the time spent on each stage of the dispute resolution process.

3. By December 31, 2002, and by the end of December of each year thereafter, an annual report detailing the time required for each customer to complete each of the six steps set forth in the interconnection process, as identified in Appendix III, section 1(c).⁸ Also, for each application or request the utility receives, the: (A) customer's name and location; (B) start and end date of the interconnection process;

⁸At its option, each utility may: (1) combine the quarterly reports into a single report; and (2) combine the year-end quarterly reports with the annual report.

In addition, distributed generators interested in providing background information or input on their experiences in interconnecting with the utility's electrical system, may share their information in writing with the Consumer Advocate.

(C) size and type of the distributed generation unit;
(D) identification of any additional technical studies required, including the factors and criteria that caused the need for the additional studies, and the cost of the additional studies; and
(E) identification of the additional protective equipment required, including the cost of the additional equipment, to the extent this information is available to the utility.

C.

The commission will conditionally approve the parties' joint submission. The utilities shall submit their respective tariffs, incorporating any revisions made resulting from: (1) their review of the commission's observations; and (2) the Consumer Advocate's consent thereto. The utilities' respective transmittal letters shall describe with particularity their responses to each of the commission's observations.

D.

The commission recognizes that distributed generation/interconnection is an evolving, "work in progress" in this State. The parties' joint submission represents a step forward, with the goal of improving and streamlining the interconnection process.

The commission intends to closely monitor the utilities' and distributed generators' actions in achieving the commission's underlying objective of facilitating the development and use of distributed generation in the State. Any adjustments

or modifications to the utilities' respective tariffs can be made, if necessary.

V.

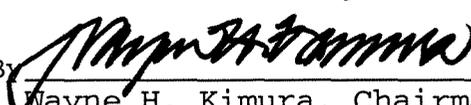
THE COMMISSION ORDERS:

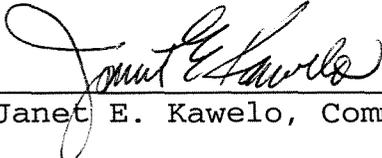
1. The parties' joint submission, filed on September 23, 2002, is conditionally approved. HECO, HELCO, and MECO shall submit to the commission their respective tariffs, incorporating any revisions made resulting from: (A) their review of the commission's observations; and (B) the Consumer Advocate's consent thereto. The respective transmittal letters shall describe with particularity the utilities' responses to each of the commission's observations. Upon review of these tariffs, further commission action will follow.

2. HECO, HELCO, and MECO shall submit to the commission and Consumer Advocate the quarterly and annual reports set forth in section III, above. The Consumer Advocate, in turn, may submit its comments in response to any of the utility's reports.

DONE at Honolulu, Hawaii this 15th day of November,
2002.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Wayne H. Kimura, Chairman

By 
Janet E. Kawelo, Commissioner

By (RECUSED)
Gregg J. Kinkley, Commissioner

APPROVED AS TO FORM:


Michael Azama
Commission Counsel

02-0051.sl

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing Decision and Order No. 19773 upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

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DATED: November 15, 2002