



June 1, 2020

The Honorable Chair and Members  
of the Hawai'i Public Utilities Commission  
Kekuanao'a Building, First Floor  
465 South King Street  
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Hawai'i Electric Light Company, Inc.  
Rebuild Agreement and PPA Negotiations with Puna Geothermal Venture  
Quarterly Update

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The Commission requested in its letter dated May 9, 2019 that Hawai'i Electric Light Company, Inc. (hereinafter "Hawaiian Electric" or the "Company")<sup>1</sup> keep the Commission updated quarterly, beginning on June 1, 2019, regarding the status of permits required for the Puna Geothermal Venture ("PGV") facility to come back online (including but not limited to those set forth in Exhibit D, PGV's Government Approvals, of Exhibit A (Rebuild Agreement) to the Company's March 8, 2019 letter) and status of negotiations of a restated PPA, and updated, as necessary, regarding any other relevant developments, until the Commission determines otherwise. Since the negotiations are complete and the Amended and Restated Power Purchase Agreement moves forward in Docket No. 2019-0333, the Company provides an update to the Commission on the progress of the PGV rebuild efforts. In response to the Commission's letter and Orders, Hawaiian Electric respectfully submits its quarterly report on relevant developments for the months of March, April, and May 2020.

### **Status of Permits**

PGV has provided the Company with an update regarding the status of PGV's permits as well as a revised Exhibit D, which is attached hereto as Attachment 1. In Summary, every permit required to operate the PGV facility remains, and has remained without interruption, in full force and effect and is active. PGV needs no other permit to resume operations of its facility.

a. **Geothermal Resource Permit (GRP 2)**

- This permit is issued, administered and enforced by the County of Hawai'i and governs the operation of PGV's facility.
- Regulatory oversight is by the County Planning Department.

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<sup>1</sup> Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai'i Electric Light Company, Inc. are each doing business as "Hawaiian Electric" and have jointly registered "Hawaiian Electric" as a trade name with the State of Hawai'i Department of Commerce and Consumer Affairs, as evidenced by Certificate of Registration No. 4235929, dated December 20, 2019.

- This permit remains in full force and effect and continues to be active.
  - Although not required by the GRP 2, PGV hired an acoustical engineer to help assess noise levels during the restoration of the PGV facility. To date, noise surveys have been performed prior to drilling, during construction activities and during drilling operations. Results of these surveys indicate that PGV activities have followed State noise regulations. An additional noise survey will be conducted after the facility has returned to operational status. Results of the noise surveys will be compiled by the acoustical engineer and PGV will share the results at the next Community Meeting, following the compilation of the data.
  - Although not required by the GRP 2, PGV continues to provide weekly wellfield and plant activity updates to the Department of Land and Natural Resources, Hawai'i County (Planning and Civil Defense departments respectively), Hawai'i Department of Health Clean Air Branch, Hawai'i Department of Health Safe Drinking Water Branch for Underground Injection Control, Hawai'i Department of Health Noise Branch and the United States Environmental Protection Agency (EPA) Clean Water Branch for Underground Injection Control.
  - Additionally, PGV posts a copy of their weekly report at [www.punageothermalproject.com](http://www.punageothermalproject.com) for anyone interested, to access.

b. County Building Permits.

- PGV's permit application for three Air Quality Monitoring Stations continues to be reviewed by the Department of Public Works at the Structural division for final building approval. The COVID-19 pandemic has contributed to the delay with completing this process. However, in the interim, all three Monitoring Stations have continued to be in full operation on a 24/7 basis and are compliant with DOH Clean Air Branch permit requirements. Noise levels, hydrogen sulfide emissions, wind direction, wind speed and rainfall are the primary elements being monitored. For the Department of Health, Clean Air Branch's Noncovered Source permit with PGV, hydrogen sulfide (H<sub>2</sub>S) and noise levels are the two primary elements of interest. Particulate matter emissions are monitored during drilling activities.
  - All three Monitoring Stations are equipped not only with Hydrogen Sulfide (H<sub>2</sub>S) but also with Sulfur Dioxide (SO<sub>2</sub>) monitoring capabilities. PGV voluntarily installed SO<sub>2</sub> monitoring as a result of the post eruption residual emissions that are still active. Since the eruption there are still numerous fissures continuing to emit SO<sub>2</sub> and H<sub>2</sub>S.
  - PGV's backup generators at the Monitoring Stations are in very good working condition. These backup generators will provide power to the Monitoring Stations in the event that Hawaiian Electric power supply, or the UPS battery systems are interrupted. The backup generators are an additional safety and

reliability measure to keep the Monitoring Stations in operational condition, to the fullest extent possible.

- Although not required by any permits, PGV continues to provide internet access to the noise and H<sub>2</sub>S data recorded at the three Monitoring Stations. This information can currently be accessed from the Ormat website [www.ormat.com](http://www.ormat.com) or more directly by typing in the IP address 107.85.101.148/pgvpublic/. Having this data made available to the public is not a DOH requirement. PGV voluntarily provides this data to anyone interested in the interest of safety and transparency.
- PGV's Grading and Grubbing permit for the facility driveways and the substation earthwork was received on December 7, 2018. This permit remains active as bulldozing, rock crushing and grading continues.
- PGV's building permit, for the electrical substation rebuild, continues to be active and in full force. Concrete work, structural and electrical work activities are ongoing.

c. Plan Of Operation (POO).

- This permit is approved, administered and enforced by the State Department of Land and Natural Resources ("DLNR") for the development and operation of all geothermal wells.
- Regulatory oversight resides within the DLNR Engineering Department.
- This permit remains in full force and effect and continues to be active.

d. Geothermal Well Permits Several permits for maintenance and drilling of specific geothermal wells have been issued by DLNR and each remains in full force and effect and is active.

- KS-14 well maintenance ACTIVE since 12/21/2018
  - Maintenance workover was completed in October 2019.
- KS-9 well maintenance ACTIVE since 4/5/2019
  - Start time for this work is under consideration for a future date, to be determined.
- KS-16 well maintenance ACTIVE since 4/5/2019
  - Start time for this work is under consideration for a future date, to be determined
- KS-15 well maintenance ACTIVE since 7/16/2019
  - Maintenance workover is completed and Reinjection well KS-15 is available for operations.
- KS-13 well maintenance ACTIVE since 7/20/2019
  - Maintenance workover was completed at the end of December 2019. Reinjection well KS-13 is available for operations.

- KS-18 drilling (new well) ACTIVE since 8/9/2019
    - Drilling commenced in late October 2019 and has been completed as of May 1, 2020. Production well KS-18 is available for operations after being connected to the facility.
  - KS-17 drilling (new well)
    - Drilling commenced in mid-May 2020 and is anticipated to be completed by the third quarter of 2020.
- e. Well Permits - Groundwater Wells. Two groundwater wells have been permitted through DLNR's Commission on Water Resource Management and each remains in full force and effect and is active.
- MW-4 new water well                      Active since 6/11/18  
MW-4 is currently operational and providing water to the facility for power plant and drilling activities.
  - MW-5 new water well                      Active since 3/8/19  
MW-5 has been drilled to about 820 feet and currently under consideration to complete the well later, to be determined.
  - Although not required by any permits, PGV continues to hold regular monthly status updates via conference calls with onsite DLNR representative and DLNR staff personnel from Honolulu.
- f. Non-Covered Source Permit (NSP) No. 0008-02-N.
- This permit is issued, administered and enforced by the Hawai'i State Department of Health ("DOH") for the operation of the PGV's facility.
  - Regulatory oversight resides within the Clean Air Branch.
  - This permit is undergoing a renewal process. A contested case hearing is pending with the schedule for the hearing yet to be determined, due to the COVID-19 pandemic.
  - This permit remains in full force and effect and is active.
- g. Non Covered Source Permit (NSP) No. 0008-03-N.
- This permit is issued, administered and enforced by the DOH for the operation of the PGV's wellfield.
  - Regulatory oversight resides within the Clean Air Branch.
  - This permit remains in full force and effect and is active.
- h. Underground Injection Control (UIC) Permit No. UH-1529.
- This permit is issued, administered and enforced by the DOH for the operation of PGV's reinjection wells.
  - Regulatory oversight resides within the Safe Drinking Water Branch.

- This permit remains in full force and effect and is active.
- i. Underground Injection Control (UIC) HI 596002.
  - This permit is issued, administered and enforced by the U.S. Environmental Protection Agency Region IX for the operation of PGV's reinjection wells.
  - Regulatory oversight resides within the Clean Water Branch of the EPA.
  - This permit is undergoing a renewal process.
  - This permit remains in full force and effect and is active.

#### **Status of PGV's work and Test Energy:**

Please see PGV's March 2020 Progress Report related to Force Majeure Event dated April 15, 2020, provided as Attachment 2 hereto.

PGV recently completed the drilling of a new geothermal production well, KS-18 in the beginning of May 2020. Ormat's Projects Team is currently providing construction services to connect the new well to the Power Plant. PGV anticipates that restart of the facility will take place in late June 2020. Restart activities will be in accordance with the signed "Acceptance of Test Energy" letter agreement dated November 6, 2019.

#### **Status of Rebuilding of Transmission Lines**

As a result of the Commission's directives in the May 9, 2019 letter, the Company immediately ceased work on the transmission lines and filed an Application for Approval to Construct 69 kV Overhead Transmission Line Segments to Reconnect the PGV facility on June 7, 2019 (see Docket No. 2019-0119). In this application, Hawaiian Electric proposed to construct certain 69 kV overhead transmission line segments necessary to reconnect the PGV generating facility to the Company's electric system. Although this Docket was temporarily suspended, and Company personnel began to mostly work from home from the end of March 2020 due to COVID-19, the Company continued to prepare for such work by monitoring the delivery of steel poles and materials, which have a long-lead time, and which PGV has paid for 100% of the cost of the poles. The steel poles are estimated to arrive on June 1, 2020, and 69kV insulators on June 11, 2020. The Company has begun preparations for construction, at PGV's cost, while awaiting a Commission Decision in Docket No. 2019-0119.

#### **Status of Rebuilding of Pohoiki Switching Station**

In addition to rebuilding the overhead transmission line segments, the Company must also rebuild the Pohoiki Switching Station that was destroyed during the 2018 Kilauea eruptions. The Company continued its work on procuring long-lead materials and contracted the Civil Structural Architectural ("CSA") work for the Pohoiki Switching Station. PGV provided advance payment for this work. Final plan approval was issued by the County of Hawai'i. The

CSA contractor completed work on conduit, foundations and all underground grounding wires. The substation was backfilled to its final grade. Steel structures have been stood and the crossbars have been installed. Construction began for the control house walls and roof. The CSA work for the switching station is nearly complete, with the roof and fencing remaining to be finished up. An Electrical contractor was selected and began safety training process. Electrical construction is scheduled to begin on June 1, 2020. The microwave tower has been purchased and the materials are estimated to arrive at the end of June. The Company prepared the bids and selected the contractor for the installation of the microwave tower. The Company is working with the manufacturer to finalize the foundation designs.

### **Community Outreach**

Exhibit E of the Rebuild Agreement provided PGV's extensive Community Outreach Plan. PGV's last Community Meeting was held in Pahoa on January 22, 2020. Representatives from the County and Hawaiian Electric participated. There were about a dozen or so community members that attended. The County, Hawaiian Electric and PGV provided updates to the attendees. PGV's next Community Meeting was scheduled for April 17, 2020 in Pahoa. Unfortunately, the COVID-19 pandemic in Hawai'i and the Governor issued Emergency Orders prevented the Meeting from taking place. PGV is hopeful to be able to schedule a Community Meeting in the coming months, depending on direction from the State and the County. If the pandemic continues to prevent in person meetings in the next month or two, PGV will schedule an online meeting as a backup. Details are being worked on.

### **Conclusion**

The Company appreciates this opportunity to update the Commission on the status of PGV-related issues with respect to the rebuilding and resumption of operations of the facility.

The Company looks forward to successfully bringing PGV back into service and restoring a valuable renewable resource to the Company's grid. Please contact Sharon Hirai at (808) 969-0428 should you have any questions regarding this matter.

Sincerely,

/s/ Kevin M. Katsura

Kevin M. Katsura  
Director  
Regulatory Non-Rate Proceedings

Enclosures

cc: Division of Consumer Advocacy



## EXHIBIT D – GOVERNMENTAL APPROVALS

[May 27, 2020]

Each of the permits listed is in full force and effect and is active, and no further action or approval is required by Puna Geothermal Venture to start up the facility.

<b>Government Agency</b>	<b>County of Hawaii Planning Commission</b>	<b>State of Hawaii Department of Land and Natural Resources (DLNR)</b>	<b>State of Hawaii Department of Health Clean Air Branch (HDOH - CAB)</b>	<b>State of Hawaii Department of Health Safe Drinking Water Branch</b>	<b>United States Environmental Protection Agency (EPA) Region IX</b>
<b>Permit</b>	Geothermal Resource Permit (GRP 2)	Plan of Operation (POO)	Non Covered Source Permits (NSP) No. 0008-02-N (Power Plant) & No. 0008-03 (Wellfield)	Underground Injection Control (UIC) UIC Permit No. UH-1529	Underground -Injection Control (UIC) HI 596002
<b>Status/Scope</b>	Active, primarily for land use issues. Allows Facility to increase up to 60 MW	Active, primarily for wellfield development and maintenance. As of 1/17/06, allows development of up to 28 Wells and up to 60 MW.	Active, Primarily Air Quality for a 41 MW Nominal Power Plant & Wellfield	Active, regulates injection of fluids	Active, Regulates injection of fluids



4/15/2020

Hawaii Electric Light Company, Inc.  
Sharon Suzuki, President  
1200 Kilauea Avenue  
Hilo, Hawaii 96720-4295

*Delivery by email and mail*

Dear Mrs. Suzuki:

Subject: March 2020 Progress Report related to Force Majeure Event

References:

Power Purchase Contract For Unscheduled Energy Made Available from A Qualifying Facility dated March 4, 1986, as amended ("1986 PPA")

Power Purchase Agreement between Puna Geothermal Venture ("PGV") and Hawaii Electric Light Company, Inc. dated February 7, 2011 ("2011 PPA") PGV Notice of Force Majeure of May 30, 2018 ("PGV Notice of Force Majeure")

Rebuild Agreement Between Puna Geothermal Venture and Hawai'i Electric Light Company, Inc. dated March 7, 2019

The plant remained offline for the month of March 2020 due to the lava intrusion. However, this month the plant made progress in its ability to return to service.

Ongoing wells recovery work continued. The plant dismantled surface equipment on KS-14. Work continues on KS-18, as well as beginning drilling on KS-17. Work continues on the OECs. Currently PGV is installing structures and working on cable trays on PGV substation. Foundation work has been completed.

Regularly scheduled Community Meetings are mandated in the Rebuild Agreement between PGV and Hawaiian Electric. However, due to the COVID-19 pandemic and in





accordance with Governor Ige's Emergency Proclamation, PGV has postponed its scheduled community meetings until further notice.

Sincerely,

A handwritten signature in black ink, appearing to read 'Evan Warner', is positioned above the printed name.

Evan Warner  
Asset Manager

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COMMISSION

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