

PGV COMMUNITY OUTREACH PLAN

December 2019

Background

Geothermal energy is provided naturally as a product of the Earth's heat that over many millions of years created the Hawaiian Islands. Hawaii sits in a hot spot in the Pacific Ocean, which scientists believe will continue to produce heat for millions of years to come. PGV started commercial operations in 1993 as a 25 MW Facility, and over the years has gone through several amendments to the power purchase agreements to increase generation. In 1995, PGV increased its contractual obligation from 25 MW up to 30 MW without adding any new equipment or drilling additional geothermal wells. The additional 5 MW of generation only required an increase in the amount of steam. Both the 25 MW and additional 5 MW contracts had energy pricing linked to oil prices. However, in 2012, PGV and HELCO negotiated an additional 8 MW contract, bringing the Facility to its present contractual obligation of 38 MW. New electric generating equipment was needed, but no additional geothermal wells were required because the 8 MW Facility was designed to utilize the hot water, or brine, from the geothermal resource. Prior to the 8 MW expansion, all hot water was routed directly back to the reinjection wells. The 8 MW contract resulted in PGV delinking energy pricing on certain portions of the available capacity, which in turn saved rate payers millions of dollars from 2012 until the Facility was taken offline in 2018 due to the volcanic eruption.

Throughout the entire life of the PGV Facility, community outreach has been an integral activity for PGV operations. Historically, for many different reasons, the PGV project has generated much interest from various stakeholders on Hawai'i Island and throughout the State. Support for and opposition to the PGV project from community members, government agencies, business organizations, government officials, legislators, cultural practitioners, the utility and many others, have been well documented during the past several decades. Today, through continued committed Outreach and participation with numerous businesses, civic and community activities, PGV affirms that the majority of the various stakeholders are supportive of geothermal energy production.

Routine Community Meetings

Prior to the 2018 lower east rift zone eruption event, PGV performed outreach and engaged with government agencies and the nearby communities for routine and non-routine activities. On a routine basis, PGV would hold quarterly community meetings, usually at the Pahoa Community Center. Invitees included nearby residents of Lanipuna Gardens, Leilani Estates, Nanawale Estates, Kapoho Community, County representatives (Mayor, Civil Defense, Fire, Police, Councilmembers, etc.), State Agencies (DLNR, DOH Clean Air Branch, DOH Safe Drinking Water Branch, DOH Hazard Evaluation and Emergency Response), State legislators (both House and Senate members), media representatives and HELCO. PGV's routine Community Meeting would generally consist of a Plant Update and a question and answer session. Updates would include plant safety performance, generation levels and the mention of upcoming activities in the coming quarter by the Plant Manager. PGV's Business Development representative would then provide any updates on other matters of interest, such as pending legislation, company support to nearby schools or non-profits organizations etc. In general,

the majority of our routine quarterly meetings have been attended by about a dozen or more stakeholders.

In addition to the routine Quarterly Community Meetings held in Pahoia town, PGV would also meet with the three largest nearby community associations (Leilani Estates, Nanawale and Kapoho) at their regularly scheduled community association meetings. PGV would participate as guests during these community association meetings and would provide operational and administrative updates, before providing a question and answer session. In general, our neighborhood associations have generally been supportive. The primary concerns mentioned at these meetings consisted of nighttime noise and lighting related issues. PGV committed to addressing all concerns.

Above and Beyond Community and Stakeholder Meetings

PGV has held numerous Community Meetings for non-routine activities (e.g. drilling activities). Geothermal well drilling on the average, has taken place about once or twice, every five years. During periods of drilling, PGV would schedule more frequent meetings, which would occur on a bi-monthly or on an as needed basis. PGV personnel, including drilling engineers would provide the community and other stakeholders with the latest drilling information (depth, size, expected duration to completion, etc.). Initially, these meetings are usually attended by more nearby residents (as much as 40 or so) and then result in less participants as the drilling periods near their completion dates.

Prior to commencing any drilling activities, PGV has, and will continue to hold informational meetings for all applicable governmental agencies and would reach out to State and County leadership. For example, prior to the start of geothermal well drilling in October 2019, PGV and Ormat engineers scheduled an informational meeting on Oahu. Participants included, DLNR Engineering, CWRM, DOH Clean Air Branch, DOH Noise Branch, DOH HEER Branch, DOH Underground Injection and EPA Region 9 Clean Water Branch out of San Francisco. Ormat engineers provided a detailed presentation and explanation of the planned drilling activities. At the closing of the meeting, PGV and Ormat answered questions from agency personnel. Following the meeting on Oahu, PGV next met with Hawaii County officials at the Civil Defense Administration Operations Center. The Mayor's office, Planning Department, R&D Department, Public Works Department, Police and Fire were all in attendance. Once all State and County agencies were briefed, PGV staff would next go out to the nearby community associations to provide PGV's plans for upcoming drilling activities.

Separately, the Governor, Mayor of Hawaii County and key State and County Legislators would also be briefed by PGV personnel on the upcoming activities or just general updates accordingly.

For the proposed repowering of the PGV Facility, Outreach activities will be performed above and beyond what has been done historically and be similar to when we are preparing to drill new geothermal wells.

Community Outreach for 2019 & Beyond

The 2018 volcanic eruption event has been described by volcanologists and other scientists as an unprecedented eruption episode in Hawaii islands modern history. The PGV Facility was fortunate with regards to lava impact. PGV's electrical substation, three geothermal wells, drilling equipment,

miscellaneous equipment and a storage area was inundated by lava, however the two generating Facilities escaped unharmed

In 2019, PGV focused on returning to operational status. As of December 2019, PGV was able to recover one geothermal production well and two geothermal reinjection wells. Operational status is pending the return of heat to the geothermal production well, which can sometimes take several days to weeks.

For the calendar year 2020 and beyond, PGV will schedule community meetings on a quarterly basis. If activities at the Facility require more frequent meetings, PGV will make announcements in the local newspaper and at our micro website located at www.pungeothermalproject.com.

Community Outreach Schedule for the Calendar Year 2020				
Activity/Event	When	Location	Time	Agenda
Quarterly Community Outreach Meeting	January 22, 2020	Pahoa Community Center	4 – 6 PM	PGV Operational updates, Business Development updates, question and answering period
Quarterly Community Outreach Meeting	April 17, 2020	Pahoa Community Center	4 – 6 PM	PGV Operational updates, Business Development updates, question and answering period
Quarterly Community Outreach Meeting	July 17, 2020	Pahoa Community Center	4 – 6 PM	PGV Operational updates, Business Development updates, question and answering period
Quarterly Community Outreach Meeting	October 16, 2020	Pahoa Community Center	4 – 6 PM	PGV Operational updates, Business Development updates, question and answering period

For the communities’ interest and safety concerns, PGV maintains two telephone numbers that anyone can call to find out about Facility activities or to report concerns or to ask questions about the PGV Facility:

- PGV Information Line: This line provides a recorded message that is updated daily. The day’s activities and other contact numbers are provided. The number is **808.934.9072**.
- PGV Response Line: This is a 24/7 answering service provider that will take calls from the community or anyone else wanting to make contact with PGV personnel. The answering operator will ask for a name, a contact number and record the question, comment or concern from the caller. If requested, PGV personnel will follow up with return calls. The number is **808.369.9094**.