Report to the Thirty-First Legislature
2022 Regular Session

GEOTHERMAL ROYALTIES DISPOSITIONS
and
STATUS OF GEOTHERMAL AND CABLE SYSTEM DEVELOPMENT
FISCAL YEAR 2021

Prepared by the

Department of Land and Natural Resources
State of Hawaii

In response to
Sections 182-18 and 196D-11, Hawaii Revised Statutes

November 2021
GEOTHERMAL ROYALTIES DISPOSITIONS
and
STATUS OF GEOTHERMAL AND CABLE SYSTEM DEVELOPMENT
FISCAL YEAR 2021

This report is prepared pursuant to Sections 182-18 and 196D-11, Hawaii Revised Statutes (HRS), and covers the period from July 1, 2020 through June 30, 2021.

Section 182-18, HRS – Geothermal Royalties
During Fiscal Year (FY) 2021, Puna Geothermal Venture (PGV) worked to restore electrical production after a long hiatus due to the 2018 eruption along the Kilauea East Rift Zone (KERZ). Existing geothermal wells were modified, and new wells were drilled to restore electrical production. PGV also began updating its power plant infrastructure by replacing older power generation equipment with more efficient units and refurbishing electrical substations with the goal of increased efficiency and clean energy production to meet its allowed energy production limits.

In FY 2021, geothermal royalties were received in the amount of $232,705.45. Statutory distributions to the County of Hawaii (30% or $69,811.64) and the Office of Hawaiian Affairs (20% or $46,541.09) were made during this period.

Issued Permit(s)
8 (eight) permits were granted to maintain existing wells and to drill new geothermal wells.

<table>
<thead>
<tr>
<th>Well Number</th>
<th>Well Type</th>
<th>Permit Type</th>
<th>Date Permit Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS-17</td>
<td>Production</td>
<td>Maintenance</td>
<td>8/13/20</td>
</tr>
<tr>
<td>KS-18</td>
<td>Production</td>
<td>Maintenance</td>
<td>8/24/20</td>
</tr>
<tr>
<td>KS-19</td>
<td>Development</td>
<td>Drill</td>
<td>9/4/20</td>
</tr>
<tr>
<td>KS-14</td>
<td>Production</td>
<td>Maintenance</td>
<td>10/6/20</td>
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<tr>
<td>KS-18</td>
<td>Production</td>
<td>Maintenance</td>
<td>10/16/20</td>
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<td>Development</td>
<td>Drill</td>
<td>11/16/20</td>
</tr>
<tr>
<td>KS-11</td>
<td>Injection</td>
<td>Maintenance</td>
<td>2/17/21</td>
</tr>
</tbody>
</table>

Section 196D-11, HRS - Geothermal and Cable System Development
The Department of Land and Natural Resources is responsible for the effective management of geothermal resources and its development, to protect the health and safety of the public and to ensure the continued viability of the resource for the future. Currently, the Island of Hawaii is the only island benefiting from geothermal development. Power generation from geothermal energy began in May 1993 and, on average, annually provided more than 25% of the Island’s power demands. Currently power generation is ramping back up to reaccommodate those demands.

No program work was performed during the FY to effectuate the intent of this statute regarding an interisland deep water electrical transmission cable system.