Washoe County Board of Adjustment



Vicinity Map



- The parcels (APN 071-150-09, 71-220-18, 071-220-19, 071-220-23) are located within the High Desert Area Plan, along SR 447 and SR 34 north of Gerlach, NV.
- General Rural (GR)
- Federal ownership managed by the Bureau of Land Management (BLM)



Request



- The request is for an administrative permit for the construction and drilling of up to 13 geothermal test wells.
- Construction includes the grading of well pads and improvements to an existing access road to support operations.



Background



- The proposed drilling of geothermal test wells use is classified as a renewable energy use type and is permitted in the General Rural (GR) regulatory zone via an administrative permit per WCC 110.308.05.
- Per WCC 110.308.05, a geothermal development consists of all wells, access roads, surface equipment, facilities, pipelines, and transmission lines.
- Proposed project is located within federal geothermal leases on public lands administered by the BLM in the Gerlach Geothermal Lease Unit.
- The proposed action is only for geothermal exploration and not for geothermal utilization.

Proposed Operations



- Well pads will be 2.1 acres per pad, with dimensions modified for environmental and physical characteristics of each site.
 - Pad preparation includes vegetation clearing, earthwork, and drainage – only pads scheduled to be drilled will be cleared.
- Wells will be drilled one at a time with the information gathered from the drilled well determining where the next well(s) will be drilled.
- Well depths range from 1,500 to 7,500 feet; down hole position of the well will not be allowed to extend outside of lease area.
- Water for well drilling could use as much as 35,000 gallons per day, with 6,000 gallons being used for grading and dust control.
- Up to 10 workers at each active drill site for approximately 45 days.





Gerlach Geothermal Exploration Project Washoe County, Nevada, USA

Figure 5: Well Pad Layout and Design

Visual Rendering





Analysis



Grading:

- Proposed grading will adhere to Washoe County grading standards.
- Washoe County Engineering has provided conditions to mitigate grading impacts, including a bond requirement to ensure site reclamation and revegetation.

Viewshed:

- Additional light of a single drilling operations will introduce temporary, localized sources of light to a dark sky area.
- Drill rigs will include lighting shields to reflect light away from adjacent properties and to minimize off-site glare.
- BLM determined that the project meets the agency's dark sky standards.

Water Resources:

- Commingling of geothermal fluids with underground aquifers will be mitigated by installing well casing depths a minimum of 200 feet below the ground surface.
- BLM required an additional hydrological study from applicant as part of the conditions in the Decision Record.

Wildlife:

- Project is within an area known for the winter and spring migration of big horn sheep, mule deer, and Pronghorn antelope and is also used during big horn sheep lambing season.
- NDOW provided additional condition to mitigate the potential impact during lambing season (April 15 – June 30).



APPROVE WITH CONDITIONS: I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Board of Adjustment approve Special Use Permit Case Number WADMIN22-0025 for ORNI 26, LLC, with the conditions included as Exhibit A to this matter, having made all five findings in accordance with Washoe County Development Code Section 110.808.25.

Thank you

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