CALIFORNIA STATE LANDS COMMISSION 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



JENNIFER LUCCHESI, Executive Officer (916) 574-1800 Fax (916) 574-1810 California Relay Service TDD Phone 1-800-735-2929 from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890

December 6, 2019

File Ref: SCH #2019119033

Governor's Office of Planning & Research David Black Imperial County Planning & Development Services Dept. 801 Main Street El Centro, CA 92243

STATE CLEARINGHOUSE

DEC 06 2019

VIA REGULAR & ELECTRONIC MAIL ICPDSCommentLetters@co.imperial.ca.us

Subject: Draft Mitigated Negative Declaration (MND) for Truckhaven Geothermal **Exploration Well Project, Imperial County**

Dear Mr. Black

California State Lands Commission (Commission) staff has reviewed the subject Draft MND for the Truckhaven Geothermal Exploration Well Project (Project), which is being prepared by Imperial County Planning and Development Services Department (County). The County is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) because ORNI 5 LLC (Applicant) requires a Conditional Use Permit (#18-0038) from the County for Project implementation. The Commission will act as a responsible and trustee agency under CEQA because of its leasing and permitting authority over school lands, and other state agency's surface use land, and its duty as the trustee of lands to monitor projects that could directly or indirectly impact these lands.

Commission Jurisdiction

In 1853, the United States Congress granted to California nearly 5.5 million acres of land for the specific purpose of supporting public schools. In 1984, the State Legislature passed the School Land Bank Act (Act), which established the School Land Bank Fund (SLBF) and appointed the Commission as its trustee (Pub. Resources Code, § 8700 et seq.). The Act directed the Commission to develop school lands into a permanent and productive resource base for revenue generating purposes. The Commission manages approximately 462,830 +/- acres of school lands still held in fee ownership by the State and the reserved mineral interests on an additional 790,000± acres where the surface estate has been sold. Revenue from school lands is deposited in the State Treasury for the benefit of the Teachers' Retirement Fund (Pub. Resources Code, § 6217.5).

On February 24, 2015, the Applicant filed for a negotiated geothermal lease (lease) with the Commission for approximately 3,014 acres of land located in the Truckhaven area, near the Salton Sea in Imperial County. Since that date, the lease application has been amended to approximately 2,757 acres. The lands involved have varied ownership, which include state fee-owned lands and 100 percent reserved mineral interest. The California Department of Parks and Recreation (CDPR) owns the surface estate for 723 acres of 100 percent reserved mineral interest land managed by the Commission. These CDPR lands are managed for the Ocotillo Wells State Vehicular Recreation Area. For the proposed Project, the Commission will consider a geophysical survey permit and a geothermal lease for all state-owned lands. For the CDPR's surface estate, and for Commission consideration, staff will prepare a lease with no surface use. For questions concerning Commission leasing jurisdiction, please contact Noel Saito (contact information provided below).

Project Description

The Applicant proposes to conduct a geophysical survey, and drill and test up to six geothermal exploration wells on private and State lands in the Truckhaven Geothermal Exploration Area, located south-southwest of Salton City in western Imperial County.

The geophysical survey would include approximately 3,168 receiver points distributed over approximately 119.09 linear miles of receiver lines and 3,243 source points distributed over approximately 121.97 linear miles of source lines. Two approximately 60,000-pound peak force truck-mounted vibrators equipped with hydraulically lowered pads would be used as the energy source. The vibrators would send selected vibration signals propagating though the ground. The resulting energy wave would be recorded by the receivers and transmitted wirelessly to the data collection point located at the Airport.

Each of the six proposed geothermal exploration wells would be located on separate, individual well pads that would be constructed on lands under lease to the Applicant. Each exploration well pad will be approximately 400 feet by 400 feet for a surface area of about 3.7 acres per well pad and 22.2 acres for six wells total. Well pad preparation activities would include clearing, earthwork, drainage and other improvements necessary for efficient and safe operation.

The Project objectives are as follows:

- Identify potential geothermal reservoirs of commercial quantity
- Drill into and flow test the anticipated underlying geothermal reservoir
- Detect whether the geothermal resource is commercially viable

Environmental Review

Commission staff requests that the County consider the following comments on the Project's Draft MND.

General Comments

1. Commission staff suggests the use of line numbers in the document so that commenters can better refer to specific sections of the MND.

Project Description

- 2. On Page 8 of the MND, under "Other Public Agencies Whose Approval is Required", please be advised the Commission will need to issue a geophysical survey permit for that portion of the survey located on lands managed by the Commission. In addition, the Commission will need to consider the issuance of a Mineral Extraction Lease for the drilling and possible future extraction of geothermal resources on lands where the State retains the mineral estate.
- 3. On Page 13 under "Restoration of the Geophysical Survey Area" it states "if any vegetation is removed during the seismic testing activities, it will be restored to match pre-project conditions. Please clarify how this revegetation will be performed and what the performance standards will be.
- 4. On Page 14 of the MND, the containment basins are described; however, this large (100 feet by 250 feet) component of each well site is not depicted on Figure 2. Commission staff requests clarification as to whether the containment basins would be located within the preliminary pads shown or adjacent to those pads (and therefore potentially resulting in additional impacts). In addition, the containment basins will require the excavation of about 6,500 cubic yards of earthen materials, Will this material be used in part to construct the well pads?
- 5. On Page 14 under "Well Drilling" it states the wells will be directionally drilled to approximately 4200 feet. Is this measured depth or true vertical depth? This conflicts with the statement on page 15 that reads "The typical design depth of both the production and injection wells is projected to be about 5,000 to 7,000 feet." Please clarify the difference in proposed depth.
- 6. On Page 15 also under "Well Drilling" it states "CDOGGR reviews and approves the drilling program for each well including the blowout prevention equipment (BOPE) to ensure the drilling operations are safe, protect the community, and protect land and water resources." The Commission under the mineral extraction lease has an independent but separate review and approval of the drilling program which includes the mud program, casing design, BOPE, etc.
- 7. Figure 2 shows several portions of access roads that do not appear connected to the six wells under discussion. Please explain the purpose of any alignment portions that are not associated with access to the proposed well sites.

Biological Resources

- 8. The description of the containment basins indicate that the basins would be approximately 7 feet deep; however, the description does not indicate what the internal slope of the sides would be. Commission staff requests more details regarding the internal slope of the basins and whether wildlife entrapment could occur in these basins. If entrapment is possible, the MND should include a measure that would be implemented during construction to avoid entrapment of species.
- 9. The MND states the following (Page 33): "The Proposed well sites 18-32, and 47-32 would require access roads that are located within a 100-year Federal Emergency Management Administration (FEMA) floodplain. As identified in the biological resource studies, these washes may be considered to be jurisdictional waters of the United States or S[t]ate." The Biological Resources Evaluation Report (BRER), provided as Attachment B to the MND, does not identify the desert washes as potentially jurisdictional waters, but rather as a "sparsely vegetated to bare community." However, Figure 2 in the BRER does show the category "Intermittent Stream, Wash, or Ditch," but it is unclear how old the data in that figure is or where the data was obtained.

CEQA requires a lead agency to disclose and analyze all that it feasibly can in order to ensure informed decision-making. A preliminary wetland assessment would have provided critical information related to the potential for, and significance of, environmental effects resulting from the Project. Unless conducting these analyses was truly infeasible, they should have been conducted prior to release of the MND to provide an opportunity for full public disclosure and review. Without such analyses in the MND, meaningful review of the impacts and adequacy of the mitigation by Commission staff is precluded, which may result in the need for additional information to be submitted with the geophysical survey permit and geothermal lease application. The County could be subject to additional review requirements under section 15162 of the State CEQA Guidelines, and previously undisclosed or more severe impacts could result.

In addition, MM BIO-10 currently addresses only the impacts associated with well pads 47-32 and 18-32. Commission staff requests that MM BIO-10 be modified to address the potential for additional impacts to state/U.S. wetlands/waters within the Project footprint. Otherwise, if additional impacts to these resources were discovered, they would not be mitigated by the MM BIO-10 as currently written.

Thank you for the opportunity to comment on the Draft MND. As a responsible and trustee agency, the Commission will need to rely on the adopted MND for the consideration and issuance of any geophysical survey permit and geothermal lease as specified above and, therefore, we request that you consider our comments prior to adoption of the MND.

Please send copies of future Project-related documents, including electronic copies of the adopted MND, Mitigation Monitoring and Reporting Program, and signed Notice of Determination when they become available. Please refer questions concerning environmental review to Cynthia Herzog, Senior Environmental Scientist, at (916) 574-1310 or cynthia.herzog@slc.ca.gov and for questions concerning the Commission's leasing jurisdiction, please contact Noel Saito, Associate Mineral Resource Engineer, at (562) 256-1524 or noel.saito@slc.ca.gov.

Sincerely,

Eric Gillies, Acting Chief

Division of Environmental Planning

and Management

cc: Office of Planning and Research

N. Saito, Commission

V. Perez, Commission

S. Meshkati, Commission

C. Herzog, Commission