

Imperial County
Planning & Development Services Department

NOTICE OF PREPARATION OF DRAFT EIR FOR DOGWOOD GEOTHERMAL ENERGY PROJECT, HEBER 2 PARASITIC SOLAR PROJECT, AND HEBER FIELD COMPANY GEOTHERMAL WELLS AND PIPELINE PROJECT AND NOTICE OF PUBLIC EIR SCOPING MEETING

The Imperial County Planning & Development Services Department intends to prepare an Environmental Impact Report (EIR) for the proposed Dogwood Geothermal Energy Project, Heber 2 Parasitic Solar Project, and Heber Field Company Geothermal Wells and Pipeline Project as described below. A public scoping meeting for the proposed EIR will be held by the Imperial County Planning & Development Services Department on **February 8, 2024 at 6:00 P.M.** The scoping meeting will be held at the Board of Supervisors Chambers, 2nd Floor, County Administration Center located at 940 Main Street, El Centro, CA 92243. Comments regarding the scope of the EIR will be accepted at this meeting.

SUBJECT: Dogwood Geothermal Energy Project

BOARD OF SUPERVISORS CONSIDERATION: To Be Determined.

PROJECT LOCATION: The project site is located on approximately 125 acres of privately-owned land in the southern portion of Imperial County, California, approximately one mile south of the City of Heber jurisdictional limit and approximately 0.5 miles west from the City of Calexico jurisdictional limit. The project site is within portions of three parcels: Assessor Parcel Numbers (APN) 054-250-031, 059-020-001, and 054-250-017. APN 054-250-31 is within the existing Heber 2 Geothermal Energy Complex (HGEC) located at 855 Dogwood Road, Heber, CA, and APN 059-020-001 and APN 054-250-017 are immediately southeast and east, respectively, of the HGEC. The project site is located within the Geothermal Overlay Zone, which is considered as part of the County's Renewable Energy Overlay Zone.

PROJECT DESCRIPTION: The project applicant, OrHeber 3, LLC, Heber Field Company, LLC, and the Second Imperial Geothermal Company (collectively, the "Applicants", and all wholly owned subsidiaries of Ormat Technologies, Inc. [Ormat]), has filed three separate Conditional Use Permits (CUP) applications with the County of Imperial for the construction and operation of various facilities. The three CUP applications are described below. Collectively, these three CUP applications are herein referred to as the "project."

1. Dogwood Geothermal Energy Project– CUP No. 23-0020

The Dogwood Geothermal Energy Project includes a geothermal plant and associated ancillary and auxiliary facilities, new substation, 7 megawatt (MW) solar facility, and medium voltage distribution cable from the proposed solar facility to the geothermal plant. These project components are summarized below.

- a. **ORMAT Energy Converter (Geothermal Energy Production Unit):** The proposed ORMAT Energy Converter (OEC) unit would be a two-turbine combined cycle binary unit, operating on a subcritical Rankine cycle, with isopentane as the motive fluid. The OEC system consists of a generator, turbines, a vaporizer, Air Cooled condensers, preheaters and recuperators, and an evacuation skid/vapor recovery maintenance unit (VRMU) for purging and maintenance events. The design capacity for the unit is 25 MW (net).
- b. **Isopentane Storage Tanks:** Two double-walled 20,000-gallon above-ground storage tanks would be installed for motive fluid (isopentane) storage. Numerous safety and fire prevention measures would be installed on/near the ABST, including the following:
 - Concrete foundations with blast walls separating the tank from the OEC.
 - An automated water suppression system.
 - Concrete containment areas.
 - Two flame detectors, which will immediately detect any fire and immediately trigger the automatic fire suppression system.
 - A gas detector, which will immediately detect any isopentane leak and notify the control room (manned 24/7).
- c. **Cooling Tower:** A cooling tower array will perform air-cooling operations of the geothermal fluid. The cooling tower will include a series of heat-absorbing evaporators and condensers to capture and transfer heat stored in the geothermal fluid. No water is necessary.
- d. **Dogwood Substation:** The proposed Dogwood geothermal plant will require a new substation to step up the low voltage electrical energy generated at the Dogwood geothermal unit to the higher voltage required for commercial

transmission. No upgrades to off-site transmission facilities are necessary and the new Dogwood substation will connect directly to the existing point of interconnection with the Imperial Irrigation District (IID) controlled grid. The substation will include a 13.8 kV circuit breaker to protect the electric generator, a minimum of 80 megavolt ampere 13.8 kV/115 kV transformer, and 115 kV potential and current transformers for metering and system protection. A main control building would contain instrumentation and telecommunications equipment located within the greater HGEC.

The substation footprint would measure up to 145 feet by 66 feet and would be surrounded by an eight-foot-tall chain link fence with vehicle and personnel access gates. The surface of the substation would be covered by gravel and the substation equipment would be placed onto concrete foundations.

- e. **Parasitic Solar Energy Facility:** A 7 MW solar facility would provide supplemental/auxiliary energy to the proposed Dogwood geothermal plant. The solar facility is classified as behind-the-meter and would provide supplemental energy directly to the Dogwood geothermal unit (OEC). This energy would not enter the transmission grid.
- f. **Medium Voltage Distribution Line:** The energy generated by the proposed Dogwood solar facility would be collected at an on-site XMD and switch on the western edge of the Heber 2 Project site, adjacent to South (S) Dogwood Road. A medium voltage distribution cable would cross S Dogwood Road and be attached via trays to the existing pipeline that runs west before turning north to cross the Beech Drain and Main Canal at the existing above-ground pipeline span. The cable would continue to follow the existing pipeline alignment and connect into the new Dogwood OEC. No new footings or foundations are required for the cable trays.

2. Heber 2 Solar Energy Project – CUP No. 23-0021

- a. **Parasitic Solar Energy Facility:** A 15 MW solar facility would provide supplemental/auxiliary energy to the existing Heber 2 geothermal plant. The solar facility is classified as behind-the-meter and would provide supplemental energy directly to the Heber 2 geothermal unit (OEC). This energy would not enter the transmission grid. The energy generated by the solar facility would be collected by an on-site XMD and switch and transmitted along via a medium voltage distribution cable (as described above).

3. Heber Field Company (HFC) Geothermal Wells and Pipeline Project– CUP No. 23-0022

- a. **Geothermal Production and Injection Wells:** Production wells flow geothermal fluid to the surface, and injection wells are used to inject geothermal fluid from the energy plant back into the geothermal reservoir. Injection ensures the longevity and renewability of the geothermal resource. The Applicant proposes to develop three geothermal production wells, all within the Imperial County Geothermal Overlay Zone. The wells will be sited at three of six potential locations within APNs 059-020-001 and 054-250-017. The injection well would be installed within the HGEC, immediately next to the proposed Dogwood OEC.
- b. **Geothermal Fluid Pipeline:** Approximately 4,500 feet (0.85 miles) of geothermal fluid production pipeline are proposed for installation on APN 059-020-001. This new segment of pipeline will connect to an existing pipeline collection point that will deliver the geothermal brine to the proposed Dogwood OEC. The well on APN 054-250-017 would connect to the existing pipeline segment adjacent to the proposed well pad site. The pipeline would be used to transport geothermal fluid from the production wells to the power plants.

The County Land Use Ordinance, Division 17, includes the Renewable Energy Overlay Zone, which authorizes the development and operation of renewable energy projects, with an approved CUP. The project site is located within the Geothermal Overlay Zone, which is considered as part of the County's Renewable Energy Overlay Zone. Implementation of the project would require the approval of CUPs by the County to allow for the construction and operation of the proposed facilities.

Project Applicant: OrHeber 3, LLC, Heber Field Company, LLC, and the Second Imperial Geothermal Company (collectively, the "Applicants", and all wholly owned subsidiaries of Ormat Technologies, Inc. [Ormat])

URBAN AREA PLAN: Heber Specific Plan Area

BOARD OF SUPERVISORS DISTRICT: District 2, Supervisor Luis A. Plancarte

ANTICIPATED SIGNIFICANT EFFECTS: The EIR will analyze potential impacts associated with the following: Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Cultural Resources; Geology/Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology/Water Quality; Transportation; Tribal Cultural Resources; Utilities and Service Systems; and Mandatory Findings of Significance.

COMMENTS REQUESTED: The Imperial County Planning & Development Services Department would like to know your ideas about the potential effects this project might have on the environment and your suggestions as to mitigation or ways the project may be revised to reduce or avoid any potentially significant environmental impacts. Your comments will guide the scope and content of potential environmental issues to be examined in the EIR. Your comments may be submitted in writing to Luis

Valenzuela, Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243. Available project information may be reviewed at this location.

NOTICE OF PREPARATION REVIEW PERIOD: January 19, 2024 through February 23, 2024