4 ENVIRONMENTAL ANALYSIS

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4 ENVIRONMENTAL ANALYSIS

ORGANIZATION OF SECTION 4

Chapter 4 describes the potential environmental impacts associated with the construction and operation of the proposed Hudson Ranch Power II Geothermal Flash Power Plant and the Simbol Calipatria Plant II Mineral Extraction Facility (Proposed Projects). The analysis in this Draft Environmental Impact Report (EIR) considers the Notices of Preparation (NOP)/Initial Study (April 2011 and April 2012) prepared for the Projects and the comments submitted during the scoping process (see Appendix A). Based on California Environmental Quality Act (CEQA) requirements and the scoping issues raised, Chapter 4 of this Draft EIR presents impact analysis in the following issue areas:

- 4.1 Aesthetics
- 4.2 Agricultural Resources
- 4.3 Air Quality
- 4.4 Biological and Natural Resources
- 4.5 Cultural and Paleontological Resources
- 4.6 Geology, Soils, and Mineral Resources
- 4.7 Hazardous Materials and Public Health

- 4.9 Land Use
- 4.10 Noise
- 4.11 Population and Housing
- 4.12 Public Services
- 4.13 Recreation
- 4.14 Traffic and Transportation
- 4.15 Utilities and Services
- 4.8 Hydrology and Water Quality
- 4.16 Climate Change and Greenhouse Gas

BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR

CEQA Guidelines (Section 15125(a)) require that EIRs describe the existing environmental conditions surrounding a proposed project at the time of publication of the NOP. This environmental setting provides a baseline of environmental conditions upon which the lead agency can gauge whether the impacts of a proposed project are potentially significant.

Detailed discussions of the environmental conditions for each resource and the area surrounding the Project sites are found in their respective technical resource sections of the Draft EIR (see Sections 4.1 through 4.16). These discussions describe the environmental conditions of the Project sites and the surrounding area as they existed when the NOP for the Projects was published on April 2, 2012.

ENVIRONMENTAL ASSESSMENT METHODOLOGY

The methodology used to determine potential impacts of the Projects consists of the key components summarized below. These factors are discussed for each issue area in Sections 4.1 through 4.16, which follow this introduction.

- <u>Environmental Setting</u>. The environmental setting describes existing conditions in the Project sites and surrounding area that may change as a result of the construction and operation of the Projects. Pursuant to CEQA Guidelines (Section 15125(a)), the environmental setting used for the impact analysis reflects the conditions at the time of the issuance of the NOP (April 2, 2012).
- <u>Applicable Regulations, Plans, and Standards</u>. Each issue area includes a description of current public policies, regulations, programs, and standards that apply to the Proposed Projects.
- <u>General Plan Consistency Analysis</u>. Each technical section of the Draft EIR has been evaluated for consistency with the policies in the County of Imperial General Plan (approved January 18, 1993, as amended through January 2008), as required by the CEQA Guidelines (Section 15125(d)).
- Environmental Impacts and Mitigation. Each technical section of the Draft EIR evaluates the environmental impacts of the Projects based on predetermined, specific significance criteria. In determining the significance of impacts, the assessment considers the ability of existing regulations and other public agency requirements, as well as Environmental Protection Measures (EPMs) described below, to reduce potential impacts. If an adverse impact is potentially significant despite existing regulations and requirements, mitigation measures are proposed to reduce or avoid the impact, where feasible. Mitigation measures are required only for significant adverse impacts. Once impacts and mitigation measures, as applicable, are presented, the "level of significance after mitigation" is determined.

A description of the cumulative analysis methodology and development scenario, including past, present, and reasonably anticipated projects that would affect similar resources, is included in Chapter 5.

ENVIRONMENTAL PROTECTION MEASURES AND MITIGATION MEASURES

Environmental Protection Measures

The Project applicants have incorporated design features, measures, and procedures into the HR-2 and SmCP-2 Projects, respectively, to avoid or reduce impacts from project construction, operations, and decommissioning. These environmental protection measures are referred to as EPMs; are considered in the analysis of impacts and in the determinations of impact significance; and, are presented in Chapter 3.

Mitigation Measures

Where potentially significant impacts are identified in this Draft EIR, mitigation measures are presented for the consideration of County decision makers. Each mitigation measure defines the specific requirements to reduce impacts, and also defines the relevant milestone (the timeframe within which the measure must be implemented) and the mitigation monitoring requirement.

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