5.0 ENVIORNMENTAL ANALYSIS

This chapter evaluates environmental impacts that would result from construction, operation, closure and post-closure maintenance of the Desert Valley Company Monofill Expansion Project, Cell 4 (Project or proposed Project) proposed by CalEnergy Operating Corporation's (CalEnergy or the Applicant) and alternatives to the Project. The chapter includes sections for each of the following resource areas:

| 5.1 Air Quality | 5.7 Hydrology/Water Quality |
|-------------------------------------|------------------------------------|
| 5.2 Biological Resources | 5.8 Land Use and Planning |
| 5.3 Cultural Resources | 5.9 Noise |
| 5.4 Geology and Soils | 5.10 Traffic/Transportation |
| 5.5 Greenhouse Gas Emissions | 5.11 Tribal Cultural Resources |
| 5.6 Hazards and Hazardous Materials | 5.12 Utilities and Service Systems |

5.01 Resource Area Format

Each resource area section is organized under the following headings:

- Environmental Setting;
- Regulatory Setting;
- Analysis of Impacts and Significance Determination
- Mitigation Measures; and
- Cumulative Effects.

Information contained under each heading is described below.

Environmental Setting

Each resource area section contains a discussion of the environmental setting (the existing environmental conditions in the vicinity of the entire proposed Project [project area]) and identifies the baseline physical conditions by which the significance of the Project's environmental impacts will be assessed. The baseline physical conditions for the proposed Project are the existing environmental conditions in the Project area at the time of the publication of the Notice of Preparation (NOP) (January 2020). The discussion of the environmental setting in each resource area section contains information necessary to understand the potential impacts of the Project as well as alternatives to the Project (California Environmental Quality Act Guidelines §15125(a)).

Regulatory Setting

Laws, ordinances, regulations, standards, and policies applicable to the Project and resource areas are discussed in the regulatory setting sections for each resource area. Laws and regulations may also identify permits, reviews and approvals necessary for authorization or evaluation and require agency consultation.

Analysis of Project Effects and Significance Determination

A discussion of environmental impacts and mitigation measures for the Project is presented for each environmental resource area, as applicable.

Guidelines for Determination of Significance

Significance thresholds serve as a benchmark for determining if the Project would result in significant impacts when evaluated against the baseline conditions established in the environmental setting and regulatory setting sections for each resource area. The significance criteria used are from the checklist presented in the Appendix G of the California Environmental Quality Act Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 1500015387).

Environmental Impacts

The impacts analyses presented in this chapter evaluate impacts that may occur from construction, operation, maintenance and closure of the proposed monofill. The discussion evaluates the significance of impacts, identifies mitigation measure(s) for significant impacts, and provides a determination of significance after mitigation. The analysis also evaluates additional impacts that could result from implementation of the mitigation measures, if any.

Mitigation Measures

This section provides the text of mitigation measures specific to the resource area that would be implemented to reduce significant impacts of the Project.

5.02 Terminology

The following terminology is used in this EIR to denote the significance of the Project's environmental impacts:

• **No Impact** indicates that the construction, operation, and maintenance of the project would not have any direct or indirect effects on the environment. It means no change from existing conditions. This impact level does not need mitigation.

- A Less Than Significant Impact is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A **Significant Effect** on the environment is defined in CEQA Section 21068 as one that would cause "a substantial, or potentially substantial, adverse change in the environment", which includes any of the physical conditions within the area affected by the project as they exist at the time the notice of preparation is published." Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the project must be provided, where feasible, to reduce the magnitude of significant impacts.
- An Unmitigable Significant Impact is one that would result in a substantial or potentially substantial adverse effect on the environment, and that could not be reduced to a less than significant level even with any feasible mitigation. Under CEQA, a project with significant and unmitigable impacts could proceed, but the lead agency would be required to prepare a "statement of overriding considerations" in accordance with State CEQA Guidelines Section 15093, explaining why the lead agency would proceed with the project in spite of the potential for significant impacts.

5.03 Approach to the Cumulative Impact Analysis

CEQA Guidelines, Section 15130 requires that EIRs include an analysis of the cumulative impacts to determine if the project's effect is considered cumulatively considerable. As defined by CEQA Guidelines, Section 15065(a)(3), "... 'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects..." Section 15130(b)(1) goes on to identify two approaches for performing a cumulative analysis: (1) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (2) A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. The cumulative analysis for the proposed Project utilized the list approach. According to Section 15130(b)(2), when using the list method, it is important to consider the nature of each environmental resource being examined, the location of the project, and its type. In keeping with these provisions, a list of cumulative projects was developed and includes projects known at the time of release of the Notice of Preparation of the Draft EIR, as well as additional projects that have been proposed since the NOP date. Table 7-1 lists the cumulative projects, the locations of which are shown on Figure 7-1.

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