# CHAPTER 4.0 ENVIRONMENTAL ANALYSIS

This chapter provides a brief overview of the thirteen environmental factors covered in the environmental analysis. This chapter also orients the reader to the order of each environmental factor and the format of each individual section.

#### ORDER OF ENVIRONMENAL FACTOR SECTIONS

Following preparation of the Initial Study, thirteen environmental factors from the CEQA Appendix G Environmental Checklist emerged as requiring further analysis in the EIR. The sections representative of each environmental factor are presented in the same order that they are listed in CEQA Appendix G.

Section 4.1 - Aesthetics

Section 4.2 - Land Use

Section 4.3 - Transportation and Circulation

Section 4.4 - Air Quality

Section 4.5 - Climate Change and Greenhouse Gases

Section 4.6 - Geology and Soils

Section 4.7 – Cultural and Paleontological Resources

Section 4.8 – Noise

Section 4.9 - Agricultural Resources

Section 4.10 - Hazardous and Hazardous Materials

Section 4.11 – Hydrology and Water Quality

Section 4.12 – Biological Resources

Section 4.13 - Public Services and Utilities

#### **SECTION FORMAT**

As a general rule, each section has been formatted in the following order. In the case of Climate Change and Greenhouse Gases, GHG emissions generated by an individual project are evaluated on a cumulative basis due to the global nature of climate change and GHGs and their potential effects.

### **REGULATORY FRAMEWORK**

This subsection orients the reader to the three levels of regulation that may be applicable to the proposed project for each environmental factor.

Federal – Identifies relevant federal laws and regulations applicable to the proposed project.

**State** – Identifies relevant state laws (Assembly Bills, Senate Bills) and regulations applicable to the proposed project.

**Local** – Identifies local plans, policies and standards applicable to the proposed project.

#### **ENVIRONMENTAL SETTING**

This subsection describes the existing conditions that characterize the lands to be developed with the proposed Project and the surrounding area as applicable.

Key terms used include: **CUP(s)** – refers to an individual CUP (i.e. 13-0036), multiple CUPs (i.e. 13-0036, 13-0041 and 13-0043) or all CUPs (13-0036 thru 13-0052) as appropriate.

**Phased CUP Scenario** – refers to the development scenario where the Project is constructed in phases by individual CUP (i.e. 13-0036) or a group of CUPs (i.e. 13-0036, 13-0041 and 13-0043) as appropriate to accommodate market demand. This scenario also refers to the Gen-Tie, electrical collector line and other off-site ancillary facilities proposed for development as part of the Project.

**Full Build-out Scenario** – refers to all 17 CUPs, Gen-Tie, electrical collector line and other off-site ancillary facilities proposed for development as part of the Project.

**Project** – refers to construction, operation, and decommissioning of the solar field site parcels, Gen-Tie line, Electrical Collector Line Corridor, and other on-site and off-site ancillary features as described in the Project Description under either the Phased CUP Scenario or Full Build-out Scenario with up to approximately 2,794 acres of disturbance.

**Northern Cluster** or **Northern CUP Cluster** – refers to the northern-most cluster of CUPs (13-0038 thru 13-0049).

Central Cluster or Central CUP Cluster - refers to the central cluster of CUPs (13-0036 and 13-0037).

**Southern Cluster** or **Southern CUP Cluster** - refers to the southern-most cluster of CUPs (13-0050, 13-0051 and 13-0052).

**Project area** – refers to the area encompassed by the three CUP clusters as well as the areas in the immediate surrounding these clusters, Gen-Tie line, electrical collector line and other off-site ancillary facilities.

**Gen-Tie** — all inclusive term referring to the existing generation interconnection (Gen-Tie) line that extends from CUPs through the Mount Signal Solar Farm Project to the Imperial Solar Energy Center South (ISECS) switchyard as well as the eight towers that will be added to the Mount Signal Solar Farm segment of the Gen-Tie to accommodate co-location of the Project's lines with the Mount Signal Solar Farm Gen-Tie line.

**Solar Energy Center** – refers to the area developed within each CUP with PV and/or CPV panels, inverters and pad mounted transformers, substation and switchyard, energy storage, O&M building, etc.

**Electric Collector Line Corridor** – refers to the 140 foot wide corridor adjacent to many of the CUPs. This corridor will be used to connect electricity generated from each CUP to the Gen-Tie to convey electricity to the ISCES switchyard for conveyance to the Imperial Valley Substation. The voltage within the collector line corridor could be up to 230-kV, but will likely be 34.5 kV or 66 kV.

**solar field site parcels** – refers to the 32 parcels which are currently fields where the PV and/or CPV panels and associated solar equipment are proposed for development as CUPs 13-0036 thru 13-0052.

Impacts and Mitigation Measures

This subsection identifies the project-specific impacts and mitigation measures, as applicable for each environmental factor. The analysis is broken out to discuss impacts that apply to the Full Build-out Scenario as well as to specific CUPs 13-0036 thru 13-0052 as appropriate. The analysis is intended to support each CUP independently, multiple CUPs, as well as the Full Build-out Scenario.

#### STANDARDS OF SIGNIFICANCE

The standards of significance identify criteria from CEQA Appendix G Environmental Checklist applicable to each environmental factor.

#### ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

This subsection notes any issues which were scoped out as a result of the Initial Study and briefly explains why they are not included in the discussion.

#### METHODOLOGY

This subsection describes how the impact analysis was performed. Specific studies, techniques and research performed relevant to the environmental factor are identified.

#### PROJECT IMPACTS AND MITIGATION MEASURES

This subsection includes a concise impact statement that pertains to a specific standard of significance. The impact statement includes a title, a number, and a conclusion summarizing the level of significance.

Following the impact statement, a discussion is provided explaining the analysis conducted and further substantiates the conclusion of the impact statement. The discussion is divided between Full Build-out Scenario and Phased CUP scenario, as appropriate.

### **Mitigation Measures**

If necessary, mitigation measures are provided to reduce, minimize or alleviate the impact identified. The mitigation measures are numbered to correspond with the impact number and are designated to apply to the between Full Build-out Scenario and/or specific CUPs 13-0036 thru 13-0052, as appropriate.

## **Significance After Mitigation**

A brief concluding assessment is provided explaining the effectiveness of the mitigation and any remaining significance following implementation of the mitigation measure.

# **CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES**

**Cumulative Setting** – Provides a brief explanation of the cumulative setting specific to each environmental factor.

**Cumulative Impacts and Mitigation Measures** - This subsection includes a concise impact statement that pertains to a specific standard of significance. The impact statement includes a title, a number and a conclusion summarizing the level of significance.

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