



Table of Contents

0.1	Introduction and Summary	0.1-1
0.2	Response to Comments	0.2-1
0.3	Errata to the Draft EIR.....	0.3-1
0.4	Mitigation Monitoring and Reporting Program.....	0.4-1
	Executive Summary	ES-1
	Project Overview	ES-1
	Purpose of an EIR	ES-2
	Eliminated from Further Review in Notice of Preparation	ES-2
	Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid the Significant Impacts	ES-2
	Areas of Controversy and Issues to be Resolved	ES-3
	Project Alternatives	ES-27
	Environmentally Superior Alternative	ES-28
1	Introduction	1-1
	1.1 Overview of the Proposed Project.....	1-1
	1.1.1 VEGA 6	1-1
	1.1.2 Ramon Substation Expansion	1-1
	1.1.3 Agency Roles and Responsibilities	1-2
	1.2 Relationship to Statutes, Regulations, and Other Plans	1-4
	1.2.1 County of Imperial General Plan and Land Use Ordinance	1-4
	1.2.2 County of Riverside General Plan	1-5
	1.2.3 Western Coachella Valley Area Plan	1-5
	1.2.4 Renewables Portfolio Standard Program	1-5
	1.2.5 Senate Bill 32	1-5
	1.2.6 Title 17 California Code of Regulations, Subchapter 10, Article 2, Sections 95100 et seq.....	1-6
	1.2.7 Federal Clean Air Act	1-6
	1.2.8 Imperial County Air Pollution Control District	1-6
	1.2.9 Federal Clean Water Act (33 United States Code Section 1251-1387).....	1-6
	1.2.10 Federal Clean Water Act and California Porter-Cologne Water Quality Control Act.....	1-7
	1.2.11 Federal Land Policy and Management Act	1-7
	1.2.12 California Desert Conservation Area Plan	1-7
	1.2.13 Desert Renewable Energy Conservation Plan.....	1-7
	1.2.14 Federal Endangered Species Act	1-8
	1.2.15 National Historic Preservation Act	1-8
	1.2.16 California Endangered Species Act	1-8
	1.2.17 California Lake and Streambed Program (Fish and Game Code Section 1602)	1-8
	1.3 Purpose of an EIR	1-8
	1.4 EIR Process	1-9
	1.4.1 Availability of Reports	1-9
	1.4.2 Public Participation Opportunities/Comments and Coordination	1-9
	1.4.3 Environmental Topics Addressed	1-10
	1.4.4 Areas of Controversy and Issues to be Resolved	1-10
	1.4.5 Document Organization	1-11

2	Project Description	2-1
2.1	Project Location.....	2-1
2.1.1	Solar Energy Facility	2-1
2.1.2	Battery Energy Storage System.....	2-4
2.1.3	Gen-Tie Line.....	2-4
2.1.4	Renewable Energy Overlay Zone	2-4
2.1.5	Ramon Substation Expansion.....	2-4
2.2	Project Objectives	2-10
2.3	VEGA 6 Characteristics.....	2-10
2.3.1	Photovoltaic Panels/Solar Arrays.....	2-10
2.3.2	Battery Energy Storage System.....	2-11
2.3.3	Interconnection Facilities.....	2-11
2.3.4	Gen-Tie Line.....	2-12
2.3.5	Security	2-13
2.3.6	Site Access.....	2-13
2.3.7	Fire Protection/Fire Suppression.....	2-17
2.3.8	Construction	2-17
2.3.9	Operations and Maintenance	2-18
2.3.10	Water Use	2-18
2.3.11	Restoration of the VEGA 6 Project Site	2-18
2.4	Ramon Substation Expansion	2-19
2.4.1	Construction	2-19
2.4.2	Operation and Maintenance.....	2-19
2.5	Required Project Approvals.....	2-20
2.5.1	Imperial County	2-20
2.5.2	Discretionary Actions and Approvals by Other Agencies.....	2-21
3	Environmental Analysis, Impacts, and Mitigation.....	3-1
3.1	Introduction to Environmental Analysis	3-1
3.1.1	Organization of Issue Areas.....	3-1
3.1.2	Format of the Impact Analysis.....	3-1
3.2	Aesthetics.....	3-2-1
3.2.1	Existing Conditions.....	3-2-1
3.2.2	Regulatory Setting.....	3-2-8
3.2.3	Impacts and Mitigation Measures	3-2-10
3.2.4	Decommissioning/Restoration and Residual Impacts.....	3-2-16
3.3	Air Quality	3-3-1
3.3.1	Existing Conditions.....	3-3-1
3.3.2	Regulatory Setting.....	3-3-6
3.3.3	Impacts and Mitigation Measures	3-3-14
3.3.4	Decommissioning/Restoration and Residual Impacts.....	3-3-31
3.4	Biological Resources.....	3-4-1
3.4.1	Existing Conditions.....	3-4-1
3.4.2	Regulatory Setting.....	3-4-23
3.4.3	Impacts and Mitigation Measures	3-4-27
3.4.4	Decommissioning/Restoration and Residual Impacts.....	3-4-40
3.5	Cultural Resources.....	3-5-1
3.5.1	Existing Conditions.....	3-5-1
3.5.2	Regulatory Setting.....	3-5-7
3.5.3	Impacts and Mitigation Measures	3-5-12
	Impact Analysis	3-5-12
3.5.4	Decommissioning/Restoration and Residual Impacts.....	3-5-18



3.6	Geology and Soils	3.6-1
3.6.1	Existing Conditions	3.6-1
3.6.2	Regulatory Setting	3.6-13
3.6.3	Impacts and Mitigation Measures	3.6-18
3.6.4	Decommissioning/Restoration and Residual Impacts	3.6-29
3.7	Greenhouse Gas Emissions	3.7-1
3.7.1	Existing Conditions	3.7-1
3.7.2	Regulatory Setting	3.7-4
3.7.3	Impacts Analysis	3.7-9
3.7.4	Decommissioning/Restoration and Residual Impacts	3.7-15
3.8	Hazards and Hazardous Materials	3.8-1
3.8.1	Existing Conditions	3.8-1
3.8.2	Regulatory Setting	3.8-5
3.8.3	Impacts and Mitigation Measures	3.8-10
3.8.4	Decommissioning/Restoration and Residual Impacts	3.8-18
3.9	Hydrology/Water Quality	3.9-1
3.9.1	Existing Conditions	3.9-1
3.9.2	Regulatory Setting	3.9-7
3.9.3	Impacts and Mitigation Measures	3.9-14
3.9.4	Decommissioning/Restoration and Residual Impacts	3.9-28
3.11	Noise and Vibration	3.11-1
3.11.1	Existing Conditions	3.11-1
3.11.2	Regulatory Setting	3.11-11
3.11.3	Impacts and Mitigation Measures	3.11-18
3.11.4	Decommissioning/Restoration and Residual Impacts	3.11-29
3.12	Public Services	3.12-1
3.12.1	Existing Conditions	3.12-1
3.12.2	Regulatory Setting	3.12-2
3.12.3	Impacts and Mitigation Measures	3.12-4
3.12.4	Decommissioning/Restoration and Residual Impacts	3.12-8
3.13	Transportation	3.13-1
3.13.1	Existing Conditions	3.13-1
3.13.2	Regulatory Setting	3.13-4
3.13.3	Impacts and Mitigation Measures	3.13-6
3.13.4	Decommissioning/Restoration and Residual Impacts	3.13-12
3.14	Tribal Cultural Resources	3.14-1
3.14.1	Existing Conditions	3.14-1
3.14.2	Regulatory Setting	3.14-1
3.14.3	Impacts and Mitigation Measures	3.14-3
3.14.4	Decommissioning/Restoration and Residual Impacts	3.14-4
3.15	Utilities and Service Systems	3.15-1
3.15.1	Existing Conditions	3.15-1
3.15.2	Regulatory Setting	3.15-5
3.15.3	Impacts and Mitigation Measures	3.15-8
	Impact Analysis	3.15-9
3.15.4	Decommissioning/Restoration and Residual Impacts	3.15-12
4	Analysis of Long-Term Effects	4-1
4.1	Growth-Inducing Impacts	4-1
4.1.1	VEGA 6	4-1
4.1.2	Ramon Substation Expansion	4-3
4.2	Significant Irreversible Environmental Changes	4-4

4.2.1	VEGA 6	4-4
4.2.2	Ramon Substation Expansion	4-4
4.3	Significant and Unmitigable Impacts	4-5
4.3.1	VEGA 6	4-5
4.3.2	Ramon Substation Expansion	4-5
5	Cumulative Impacts	5-1
5.1	Geographic Scope and Timeframe of the Cumulative Effects Analysis	5-2
5.2	Projects Contributing to Potential Cumulative Impacts	5-2
5.3	Cumulative Impact Analysis	5-2
5.3.1	Aesthetics	5-4
5.3.2	Air Quality	5-4
5.3.3	Biological Resources	5-6
5.3.4	Cultural Resources	5-7
5.3.5	Geology and Soils	5-8
5.3.6	Greenhouse Gas Emissions	5-9
5.3.7	Hazards and Hazardous Materials	5-9
5.3.8	Hydrology and Water Quality	5-9
5.3.9	Land Use and Planning	5-10
5.3.10	Noise and Vibration	5-11
5.3.11	Public Services	5-11
5.3.12	Transportation	5-12
5.3.13	Tribal Cultural Resources	5-12
5.3.14	Utilities and Service Systems	5-12
6	Effects Found Not Significant	6-1
6.1	Agriculture and Forestry Resources	6-1
6.1.1	VEGA 6	6-1
6.1.2	Ramon Substation Expansion	6-1
6.2	Energy	6-2
6.2.1	VEGA 6	6-2
6.2.2	Ramon Substation Expansion	6-4
6.3	Mineral Resources	6-4
6.3.1	VEGA 6	6-4
6.3.2	Ramon Substation Expansion	6-4
6.4	Population and Housing	6-5
6.4.1	VEGA 6	6-5
6.4.2	Ramon Substation Expansion	6-5
6.5	Recreation	6-6
6.5.1	VEGA 6	6-6
6.5.2	Ramon Substation Expansion	6-6
6.6	Public Services	6-6
6.6.1	VEGA 6	6-6
6.6.2	Ramon Substation Expansion	6-7
6.7	Utilities and Service Systems	6-7
6.7.1	VEGA 6	6-7
6.7.2	Ramon Substation Expansion	6-8
6.8	Wildfire	6-9
6.8.1	VEGA 6	6-9
6.8.2	Ramon Substation Expansion	6-10



7	Alternatives	7-1
7.1	Introduction	7-1
7.2	Criteria for Alternatives Analysis	7-1
7.3	Alternatives Considered but Rejected	7-2
7.3.1	Alternative Site	7-2
7.4	Alternative 1: No Project/No Development Alternative	7-2
7.4.1	Environmental Impact of Alternative 1: No Project/No Development Alternative	7-3
7.5	Alternative 2: Reduced Project Site	7-6
7.6	Environmentally Superior Alternative	7-6
8	References	8-1
9	EIR Preparers and Persons and Organizations Contacted	9-1
9.1	EIR Preparers	9-1
9.2	Persons and Organizations Contacted	9-2

Tables

Table 0.2-1. VEGA 6 Solar and Battery Storage Project Draft EIR Comment Letters	0.2-3
Table 0.4-1. Mitigation Measures.....	0.4-3
Table ES-1. Summary of VEGA 6 Project Impacts and Proposed Mitigation Measures.....	ES-5
Table ES-2. Summary of Proposed Ramon Substation Expansion Impacts and Proposed Mitigation Measures	ES-19
Table 3.2-1. Consistency with Applicable General Plan Conservation and Open Space Policies	3.2-11
Table 3.3-1. Criteria Air Pollutants – Summary of Common Sources and Effects	3.3-2
Table 3.3-2. Attainment Status of Criteria Pollutants in the Imperial County Portion of the Salton Sea Air Basin.....	3.3-4
Table 3.3-3. Attainment Status of Criteria Pollutants in the Riverside County Portion of the Salton Sea Air Basin.....	3.3-4
Table 3.3-4. Summary of Local Ambient Air Quality Data	3.3-5
Table 3.3-5. Summary of Local Ambient Air Quality Data	3.3-6
Table 3.3-6. Ambient Air Quality Standards.....	3.3-7
Table 3.3-7. Project Consistency with Applicable General Plan Policies	3.3-12
Table 3.3-8. Imperial County Air Pollution Control District Significance Thresholds for Operation	3.3-15
Table 3.3-9. Imperial County Air Pollution Control District Significance Thresholds for Construction Activities	3.3-16
Table 3.3-10. SCAQMD Maximum Daily Regional Emissions Thresholds.....	3.3-16
Table 3.3-11. LST Construction Thresholds	3.3-17
Table 3.3-12. VEGA 6 Project Construction-Generated Emissions (Unmitigated).....	3.3-20
Table 3.3-13. Project Construction – Generated Emissions (Mitigated).....	3.3-21
Table 3.3-14. Operational-Related Emissions – Solar and Battery Storage Facilities	3.3-22
Table 3.3-15. Ramon Substation Expansion Construction-Generated Regional Emissions (Unmitigated).....	3.3-23
Table 3.3-16. Localized Construction Emissions	3.3-29
Table 3.4-1. Vegetation Communities and Land Cover Types in VEGA 6 Project Area	3.4-2
Table 3.4-2. Special-Status Plant Species with Potential to Occur within Ramon Substation BSA	3.4-12
Table 3.4-3. Special-Status Wildlife Species with Potential to Occur within Ramon Substation BSA	3.4-15
Table 3.4-4. VEGA 6 Project Consistency with Applicable General Plan Policies	3.4-26
Table 3.5-1. VEGA 6 Project Consistency with General Plan	3.5-11
Table 3.6-1. Project Consistency with Applicable General Plan Policies	3.6-15
Table 3.7-1. Greenhouse Gas Descriptions.....	3.7-2
Table 3.7-2. California Greenhouse Gas Emissions Inventory 2000 to 2019.....	3.7-3
Table 3.7-3. VEGA 6 Project Construction-Related Greenhouse Gas Emissions.....	3.7-12
Table 3.7-4. VEGA 6 Project Operation-Related Greenhouse Gas Emissions	3.7-12
Table 3.7-5. Ramon Substation Expansion Construction-Related Greenhouse Gas Emissions	3.7-13
Table 3.7-5. Proposed VEGA 6 Project Displaced GHG Emissions	3.7-14
Table 3.9-1. Beneficial Uses of Receiving Waters.....	3.9-9
Table 3.9-2. Consistency with Applicable General Plan Policies.....	3.9-11
Table 3.9-3. Site Design Best Management Practices	3.9-16
Table 3.9-4. Source Control Best Management Practices.....	3.9-17
Table 3.11-1. Existing (Baseline) Noise Measurements.....	3.11-5



Table 3.11-2. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels	3.11-10
Table 3.11-3. Representative Vibration Source Levels for Construction Equipment	3.11-10
Table 3.11-4. Land Use Compatibility for Community Noise Environments	3.11-12
Table 3.11-5. Consistency with Applicable General Plan Policies.....	3.11-14
Table 3.11-6. Imperial County Exterior Noise Standards	3.11-15
Table 3.11-7. Construction Average Noise Levels at the Nearest Receptor – Solar/Battery Storage Facility.....	3.11-20
Table 3.11-8. Construction Noise Levels at Nearest Receptor – Gen-Tie Line.....	3.11-21
Table 3.11-9. Modeled Operational-Noise at Nearest Sensitive Receptor	3.11-25
Table 3.11-10. Construction Vibration Levels at Nearest Structure.....	3.11-27
Table 3.11-11. Vibration Source Levels for Construction Equipment.....	3.11-28
Table 3.12-1. Project Consistency with Applicable General Plan Seismic and Public Safety Element	3.12-3
Table 3.13-1. HCM Level of Service Thresholds for Intersections	3.13-7
Table 3.15-1. Consistency with Applicable General Plan Policies.....	3.15-7
Table 3.15-2. VEGA 6 Project Water Demand	3.15-9
Table 5-1. Projects Considered in the Cumulative Impact Analysis	5-3
Table 6-1. VEGA 6 Project Energy and Fuel Consumption.....	6-3
Table 7-1. Comparison of Alternative Impacts to Proposed Project.....	7-8

Figures

Figure 2-1. Regional Location	2-2
Figure 2-2. VEGA 6 Project Site	2-3
Figure 2-3. VEGA 6 Site Plan	2-5
Figure 2-4. VEGA 6 Gen-Tie Route	2-6
Figure 2-5. CDCA and DRECP Planning Areas	2-7
Figure 2-6. DRECP Renewable Energy DFA	2-8
Figure 2-7. Ramon Substation Expansion Area Location.....	2-9
Figure 2-8. Representative Example of Battery Energy Storage Systems	2-12
Figure 2-9. Representative Example of Tangent Double Circuit Wood Pole Structure.....	2-14
Figure 2-10. Representative Example of Deadend 3-Pole Structure	2-15
Figure 2-11. Representative Example of Deadend Double Circuit Pole Structure	2-16
Figure 3.2-1. Key View Map.....	3.2-3
Figure 3.2-2. Key View 1: View from Andre Road, Looking Southwest from Northeast Corner of VEGA 6 Project Site	3.2-5
Figure 3.2-3. Key View 2: View from Garvey Road, Looking East	3.2-6
Figure 3.4-1. Special-Status Species Observed On-Site.....	3.4-9
Figure 3.4-2. Coachella Valley Multiple Species Conservation Plan Area	3.4-21
Figure 3.6-1. VEGA 6 Project Site Soil Types	3.6-3
Figure 3.6-2. Regional VEGA 6 Fault Map	3.6-8
Figure 3.9-1. FEMA Flood Zone	3.9-3
Figure 3.11-1. Common Noise Levels	3.11-2
Figure 3.11-2. Nearest Sensitive Receptors to VEGA 6 Project Site	3.11-7
Figure 3.11-3. SoundPLAN Noise Map – Modeled Operational Noise Levels	3.11-23
Figure 3.15-1. USGS Groundwater Level Hydrograph	3.15-3

Figure 3.15-2. Water Year Rainfall at Brawley 2 SW.....3.15-11

Appendices

Appendix A Initial Study and Notice of Preparation and Comment Letters
Appendix B Visual Impact Assessment Letter Report – VEGA SES 6 Project
Appendix C1 Air Quality and Greenhouse Gas Assessment for the VEGA SES 6 Solar and Battery Storage Project
Appendix C2 CalEEMod Worksheets for the Ramon Substation Expansion
Appendix D1 Biological Technical Report - VEGA SES 6 Solar Project
Appendix D2 Biological Resources Report - Ramon Substation Expansion
Appendix E1 Aquatic Resources Delineation - VEGA SES 6 Solar Project
Appendix E2 Aquatic Resources Survey Report - Ramon Substation Expansion
Appendix F1 VEGA 6 Cultural Resources Inventory Report
Appendix F2 Ramon Substation Expansion - Cultural Resource Technical Study
Appendix G Geotechnical Report for the VEGA 6 Solar Project
Appendix H Phase I Environmental Site Assessment Report for the VEGA 6 Solar Site
Appendix I Noise Impact Assessment for the VEGA SES 6 Solar and Battery Storage Project
Appendix J VEGA SES 6 Solar Energy Storage Project Traffic Impact Study
Appendix K Water Supply Assessment (WSA) for the ZGlobal Vega 6, LLC Solar Energy and Battery Storage Project
Appendix L Energy Consumption Assessment for the VEGA SES 6 Solar and Battery Storage Project