

CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM SCH. No. 2011111049



Prepared for



DECEMBER 2016

Prepared by



FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT



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FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

for the

CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM

SCH. No. 2011111049

Prepared for

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**FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM**

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CHAPTER 1.0

INTRODUCTION

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This Final Environmental Impact Report (Final SEIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines §15132. The County of Imperial (County) is the lead agency for the environmental review of the Campo Verde Battery Energy Storage System (Project) and has the principal responsibility for approving the Project. This Final SEIR assesses the expected environmental impacts resulting from approval of the project and responds to comments received on the Draft SEIR.

1.1 BACKGROUND AND PURPOSE OF THE FINAL SEIR

1.1.1 OVERVIEW OF CEQA REQUIREMENTS FOR PREPARATION OF AN EIR

Imperial County has prepared this Final SEIR to provide the public, responsible and trustee agencies with information about the potential environmental effects of the proposed project. As set forth in the provisions of CEQA and implementing regulations, public agencies are charged with the duty to consider the environmental impacts of proposed development and to minimize these impacts where feasible while carrying out an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA Guidelines §15121(a) states that an EIR is an informational document for decision-makers and the general public that analyzes the significant environmental effects of a project, identifies possible ways to minimize significant effects, and describes reasonable alternatives to the project that could reduce or avoid its adverse environmental impacts. Public agencies with discretionary authority are required to consider the information in the EIR, along with any other relevant information, in making decisions on the project.

CEQA requires the preparation of an environmental impact report prior to approving any project which may have a significant effect on the environment. For the purposes of CEQA, the term “project” refers to the whole of an action which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines §15378[a]). With respect to the Campo Verde Battery Energy Storage System, the County has determined that the proposed development is a “project” within the definition of CEQA.

In determining the level of environmental review needed for the proposed Campo Verde Battery Energy Storage System (i.e. the “proposed Project”), Imperial County as the Lead Agency reviewed CEQA Guidelines *Section 15162 Subsequent EIRs and Negative Declarations*, and *Section 15163 Supplement to an EIR*. These sections of the Guidelines provide direction with regard to when additional environmental review is appropriate.

The proposed Campo Verde Battery Energy Storage System represents a new component that will be added to the existing Approved Project that was examined in the 2012 Final EIR. The Battery Energy Storage System was not envisioned or included at the time the Approved Project was put forth. Per CEQA Guidelines Section 15163 (a)(2) “the Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.”

CEQA Guidelines Section 15163 provides a short-form method where only minor additions or changes to the previous EIR would be necessary to make that EIR apply in the changed situation (i.e. inclusion of the Battery Energy Storage System). Section 15163(b) thru (e) also provide essential interpretations of how to handle public notice, public review, and circulation of the supplement to the EIR as follows:

1.0 INTRODUCTION

- (b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- (c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- (d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- (e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

Given that the Battery Energy Storage System would be located within the existing footprint of the Campo Verde Solar Project, the County determined that a Supplemental EIR (SEIR) was the appropriate level of environmental review.

1.1.2 ENVIRONMENTAL REVIEW PROCESS OF THE PROJECT

The following is an overview of the environmental review process for the Project that led to the preparation of this Final SEIR:

A. Notice of Preparation and Initial Study

In accordance with §15082 of the CEQA Guidelines, Imperial County prepared a Notice of Preparation (NOP) of an EIR on June 27, 2016. The County was identified as the lead agency for the proposed project. The purpose of the notice was to solicit comments on the proposed project; therefore it was circulated to interested parties as well as to the public, local, state, and federal agencies. The June 2016 NOP, and comments responding to the NOP, are presented in Appendix A of the Draft SEIR.

B. Draft SEIR

The Draft SEIR was prepared in October 2016 and circulated for 45-day public and agency review from October 13, 2016 to November 28, 2016. The Draft SEIR contains a description of the project; description of the environmental setting; identification of project impacts; and mitigation measures for impacts found to be significant; as well as an analysis of project alternatives. The Draft SEIR was provided to interested public agencies and was made available to the public for review at the Imperial County Planning and Development Services Department, the Imperial County Website, and local libraries.

C. Final SEIR

This Final SEIR presents the environmental information and analyses prepared for the proposed Campo Verde Battery Energy Storage System. A Final SEIR typically includes comments received addressing the adequacy of the Draft SEIR, and responses to those comments. However, following the close of the CEQA public review period on November 28, 2016, the County had not received any comment letters regarding the Draft SEIR. Thus, this Final SEIR does not include a discussion of comments and responses to comments.

Clarifications, corrections, or minor revisions have been made to the Draft SEIR and are included as part of the Errata in Chapter 3.0 of this Final SEIR. The Final SEIR in combination with the Draft SEIR and the Mitigation Monitoring and Reporting Program (MMRP) (which is included as Chapter

4.0 of this Final SEIR), will be used by the Planning Commission and Board of Supervisors in the decision-making process for the proposed project.

D. Certification of the Final SEIR/Project Consideration

The County will review and consider the Final SEIR. If the County finds that the Final SEIR is “adequate and complete,” the County may certify the Final SEIR at a public hearing. The rule of adequacy generally holds that the EIR can be certified if it: (1) shows a good faith effort at full disclosure of environmental information; and, (2) provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences.

Upon review and consideration of the Final SEIR, the County may take action to approve, revise, or reject the project. A decision to approve the project would be accompanied by written findings in accordance with CEQA Guidelines §15091 and §15093. Public Resources Code Section §21081.6 also requires lead agencies to adopt a mitigation monitoring and reporting program to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

Ultimately, the SEIR is used by the County as a tool in evaluating the proposed project’s environmental impacts and can be further used to modify, approve, or deny approval of, the proposed project.

1.1.3 INTENDED USES OF THE SEIR

The SEIR is intended to evaluate the environmental impacts of the project to the greatest extent possible. This EIR, in accordance with CEQA Guidelines §15126, should be used as the primary environmental document to evaluate all planning and permitting actions associated with the project. These actions include, but are not limited to, the following:

A. Discretionary Actions by the County of Imperial

Certification of the Final SEIR

After the required public review for the Draft SEIR, Imperial County shall respond to written comments, edit the document, and produce a Final SEIR to be considered for certification by the Planning Commission and/or Board of Supervisors prior to making a decision on the Campo Verde Battery Energy Storage System.

Mitigation Monitoring and Reporting Program

A Mitigation Monitoring and Reporting Program (MMRP) shall be adopted as required by CEQA Guidelines Section 15097.

Amend Conditional Use Permit (CUP11-0007)

The proposed Project will require amendment of CUP 11-0007 by Imperial County to allow construction and operation of the proposed Battery Energy Storage System at the proposed site.

Site Plan

Site Plan and Architectural Review is required for all non-residential projects.

B. Subsequent/Concurrent Entitlements to Implement the Proposed Project

Several entitlement actions and discretionary permits will be required from Imperial County to implement the proposed Project. They are summarized by Phase in the table below.

1.0 INTRODUCTION

**TABLE 1.0-1
DISCRETIONARY PERMITS**

	Phase 1	Phase 2
Imperial County Planning & Development Services Department		
Grading Permit/Civil Engineering Plans – Grading Permit	X	X
Mechanical Engineering Documents & Plans – Mechanical Permit	X	X
Electrical Engineering Documents & Plans – Electrical Permit	X	X
Generators- If used - Permitted or Documented	X	X
Structural Engineering Documents & Plans – Foundations – Permit	X	X
Pre-Fabricated CA Certifications	X	
Architectural Plans		X
Move-On Plan Permit	X	X
Transportation Permit(s)	X	X
Fire Suppression System Permit	X	X
Haul Route Plan	X	X
Fencing (Temporary fencing to protect while under construction, security)	X	X
Imperial County Air Pollution Control District		
Haul Route Plan	X	X
Rule 310	X	X
Construction Dust Control Plan	X	X
Operational Specialty Dust Control Plan	X	X
Potential Generators	X	X
List of all Construction Equipment	X	X
Environmental Health & Safety		
Project Review Building Plan Review (Applicant)	X	X
Purchase Order for Potable Water - Dependent on water supply. Hauled or Point of Entry.	X	X
Purchase Order Septic Waste Removal	X	X
Purchase Order Port-a-Potties	X	X
Purchase Order for Above-Ground Septic System	X	X
Regional Water Quality Control Board		
SWPPP & all Associated Documents and Reports		X
Construction NPDES Waiver	X	X

C. Discretionary Actions and Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the proposed Project. Trustee Agencies are state agencies

that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- California Department of Fish and Wildlife (CDFW) (Trustee Agency) - State Endangered Species Act compliance, California Native Plant Protection Act.
- California Regional Water Quality Control Board (RWQCB), Colorado River Basin, Region 7 – Section 401 Water Quality Certification, General Construction Activity Storm Water Permit.
- California Air Resources Board (CARB) – Review of SEIR.
- California Energy Commission (CEC) – Review of SEIR.
- California Public Utilities Commission (CPUC) – Review of SEIR.
- California Department of Toxic Substances Control (DTSC) – Review of SEIR.
- Imperial County Air Pollution Control District (ICAPCD) – Rule 801 compliance.
- Imperial County Fire Department (ICFD) – Approval of final design of the proposed fire system.

1.1.4 ORGANIZATION AND SCOPE OF THE FINAL SEIR

This document is organized in the following manner:

CHAPTER 1.0 - INTRODUCTION

Chapter 1.0 provides an overview of the EIR process to date and the required contents of the Final SEIR.

CHAPTER 2.0 - EXECUTIVE SUMMARY

Chapter 2.0 summarizes the characteristics of the proposed project and provides a concise summary matrix of the project's environmental impacts and associated mitigation measures.

CHAPTER 3.0 - ERRATA

Chapter 3.0 consists of revisions to the Draft SEIR that are a result of responses to comments, as well as minor staff edits that do not change the intent or content of the analysis; the conclusions regarding level of significance of impacts; or alter mitigation measures in their effectiveness to reduce impacts.

CHAPTER 4.0 - MITIGATION MONITORING AND REPORTING PROGRAM

Chapter 4.0 contains a matrix identifying each mitigation measure, the timing of the mitigation, the responsible agency and a place to check off when the mitigation has been completed.

1.0 INTRODUCTION

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CHAPTER 2.0

EXECUTIVE SUMMARY

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This chapter provides an overview of the Campo Verde Battery Energy Storage System (i.e. the Project) and the environmental analysis. For additional detail regarding specific issues, please consult the appropriate sections (4.1 through 4.7) (Environmental Consequences) of Chapter 4.0 of the Draft Supplemental Environmental Impact Report (Draft SEIR).

2.1 PURPOSE AND SCOPE OF THE ENVIRONMENTAL IMPACT REPORT

The Draft SEIR provided a thorough analysis of the potential environmental effects associated with the implementation of the Campo Verde Battery Energy Storage System pursuant to the California Environmental Quality Act (CEQA). The SEIR analysis focused upon potential environmental impacts arising from the Project. The SEIR adopts this approach in order to provide a credible worst-case scenario of the impacts resulting from project implementation.

2.2 PROJECT CHARACTERISTICS

The proposed Project is a utility-scale battery energy storage facility incorporating traditional lithium ion batteries. The proposed Battery Energy Storage System represents a complementary use to the Campo Verde Solar Project which will be located within the footprint of the existing Campo Verde Solar Project, west of the Campo Verde Substation and south and east of one of the solar array fields. The Substation is located west of Liebert Road, south of Wixom Road and north of Mandrapa Road. The Project is proposed to be constructed in two phases. Phase 1 of the proposed Project will be designed to store up to 5 MWH of energy while Phase 2 will be designed to store up to 100 MWH of energy. When complete, the system would be capable of storing up to 105 MWH of energy. Both phases will be designed to receive solar-generated electricity during times of excess generation or times of less desirable generation and store that power for release when the customer deems it to be more valuable. The system thus becomes a valuable tool in allowing the customer and system operator to manage intermittent renewable generation and convert it into reliable, dispatchable generation. Phase 1 construction is anticipated to begin in late 2016 with completion expected in early 2017. Phase 2 construction is expected to occur in 2018.

Further details of the proposed project are described in Chapter 2.0, subsection 2.1.3 of the Draft SEIR.

The following objectives have been identified for the proposed Project:

- To allow for the storage and sale of renewable power that the Campo Verde Solar Project is capable of generating to help meet energy needs.
- To be able to receive solar-generated electricity during times of excess generation or times of less desirable generation and store that power for release when the customer (load-serving entity) deems it to be more valuable.
- To be a valuable tool in allowing the customer and system operators to manage and convert intermittent renewable generation and into reliable, dispatchable generation.
- To build on available land previously disturbed during construction of the Campo Verde Solar Project, thus minimizing environmental and land impacts.

2.3 AREAS OF CONTROVERSY

The County of Imperial was identified as the lead agency for the proposed project. In accordance with CEQA Guidelines § 15082, the County prepared and distributed a Notice of Preparation (NOP) of an EIR on June 26, 2016. This notice was circulated to the public, local, state, federal

2.0 EXECUTIVE SUMMARY

agencies and other interested parties to solicit comments on the proposed project. The NOP is presented in Appendix A in the Draft SEIR. In addition, an Initial Study was prepared for the project and released for public review at the same time as the NOP. The Initial Study is also included in Appendix A in the Draft SEIR. Public and agency comments raised in response to the NOP were considered during the preparation of the Draft SEIR. Comments and issues are summarized in Table 1.0-1 of the Draft SEIR.

2.4 PROPOSED PROJECT

The Campo Verde Battery Energy Storage System consists of two phases. Phase 1 of the proposed Project will be designed to store up to 5 MWH of energy. Phase 1 will consist of a 424-square foot (sq. ft.) metal modular battery system container placed on a concrete foundation. Other components will be located adjacent to the battery system container. These components include the power conversion system (PCS) cabinets and transformer; supervisory control and data acquisition (SCADA) cabinet; power distribution panel; and the station service transformer. The components will be spaced to provide isolation as well as access and occupy a total of approximately 707 square feet (sq. ft.) (inclusive of the metal modular building system container). No offices or staffed control centers will be located within the container or other components. Phase 1 is proposed to begin construction in late 2016 with completion in early 2017.

Phase 2 of the proposed Project will be designed to store up to 100 MWH of energy. Phase 2 will consist of a 12,300 sq. ft. metal building with battery racks on a concrete foundation. No offices or staffed control centers will be located within the building. Other components will be located adjacent to the battery system container. These components include the PCS cabinets and transformers; HVAC units; power distribution panel; and electrical switch gear. The building and components will occupy approximately 16,068 sq. ft. of ground space (inclusive of the building). Phase 2 construction is expected to begin in 2018.

For both Phase 1 and 2, the wiring extending from the battery containers to connect the PCS to the transformers and ultimately to the substation will be placed underground in trenches. Alternatively, the wiring could be strung overhead. The wiring would extend a short distance and would not span any roads or canals.

2.5 PROJECT ALTERNATIVES SUMMARY

CEQA Guidelines § 15126.6 requires that an environmental impact report describe and analyze a range of reasonable alternatives to a project. These alternatives should feasibly attain most of the basic objectives of the project while avoiding or substantially lessening one or more of the significant environmental impacts of the project. An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. Consistent with CEQA Guidelines Section 15126.6(b), the discussion of alternatives in the SEIR focused on those alternatives which are capable of avoiding or substantially lessening any significant effects of the project.

In accordance with the provisions of CEQA Guidelines Section 15126.6, the SEIR considered three alternatives in addition to the proposed Project.

2.5.1 ALTERNATIVE 1 – PHASE 1 SOUTH OF DIEHL ROAD IN BLOCK 1

Alternative 1 is located in the area south of Diehl Road in the north section of Block 1. This location would only accommodate Phase 1. A 1,400-yard gravel access road would need to be constructed off of Diehl Road from an existing gate to the site. Wiring from the Battery Energy

Storage System would be connected to an existing Photovoltaic System Control box at this location which is currently connected to the Substation.

2.5.2 ALTERNATIVE 2 – PHASE 1 ALONG DIEHL ROAD AT THE NORTH SECTION OF BLOCK 4B

Alternative 2 is located along Diehl Road at the north section of Block 4B. This location would only accommodate Phase 1. A 90-yard access road would need to be constructed off of Diehl Road from an existing gate to the site. Wiring from the Battery Energy Storage System would be connected to an existing Photovoltaic System Control box at this location which is currently connected to the Substation.

2.5.3 ALTERNATIVE 3 – NO PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(1) requires that a No Project Alternative be analyzed in order to allow the decision-makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. Under this alternative, the proposed Battery Energy Storage System would not be constructed nor would an amendment to CUP 11-0007 be requested. The Project site would remain in its existing state as undeveloped land within the Campo Verde Solar Project site to the west of the Substation.

2.6 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table 2.0-1 displays a summary of impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance is indicated both before and after the implementation of each mitigation measure. For detailed discussions of all project level mitigation measures, refer to Sections 4.1 through 4.7 in Chapter 4.0 of the Draft SEIR.

TABLE 2.0-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

IMPACT	LEVEL OF IMPACT/SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/SIGNIFICANCE AFTER MITIGATION
AIR QUALITY/GREENHOUSE GASES			
<p>Conflict With or Obstruct Air Quality Plan</p> <p>Impact 4.1.1 Implementation of the proposed Project would increase air pollutant emissions, but would not exceed ICAPCD thresholds. Therefore, impacts with regard to obstruction of an air quality plan are considered less than significant.</p>	LS	None required	LS
<p>Violate Any Air Quality Standard/Contribute to an Existing Air Quality Violation</p> <p>Impact. 4.1.2 The proposed Project would create short-term construction emissions, but would not violate any air quality standards or significantly contribute to existing or project air quality violations. Therefore, impacts associated with violating air quality standards or contributing to existing or project air quality violations are considered less than significant.</p>	LS	None required	LS

LTS = Less than Significant
LCC = Less than Cumulatively Considerable

PS = Potentially Significant
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SU = Significant and Unavoidable

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**TABLE 2.0-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Result in Cumulatively Considerable Net Increase of Criteria Pollutant</p> <p>Impact 4.1.3 The proposed Project would generate criteria pollutant emissions during construction. However, the Project would not exceed ICAPCD emission threshold levels. Therefore, the proposed Project would result in a less than cumulatively considerable impact with regard to a cumulatively considerable net increase of a criteria pollutant.</p>	LCC	None required.	LCC
<p>Greenhouse Gas Emissions</p> <p>Due to the global nature of GHG emissions and their potential effects, GHG emissions generated by an individual project are evaluated on a cumulative basis.</p> <p>Impact 4.1.4 The proposed Project would generate GHG emissions during construction and decommissioning. However, the amount generated would not exceed 900 metric tons per year and none would be generated during Project operation. Therefore, GHG emission impacts are considered less than significant.</p>	LCC	None required.	LCC

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2.0 EXECUTIVE SUMMARY

**TABLE 2.0-1
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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
BIOLOGICAL RESOURCES			
<p>Impacts to Special-Status Species – Plants</p> <p>Impact 4.2.1 The proposed Battery Energy Storage System site has been previously disturbed in association with construction of the Campo Verde Solar Project. The Project site is currently undeveloped and vacant with some grasses and vegetation present. Because the site has been previously scraped and leveled, no impacts to special status plant species are expected to occur in association with Project construction, operation or decommissioning.</p>	LS	None required.	LS
<p>Impacts on Special Status Species – Birds (SWFL)</p> <p>Impact 4.2.2 Habitat for the SWFL is approximately one-half mile from the proposed Battery Energy Storage System site. Based on this distance, impacts to SWFL as a result of project construction, operation or decommissioning are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Impacts on Special Status Species – Birds (Ridgway's Rail)</p> <p>Impact 4.2.3 The nearest habitat for Ridgway's Rail is almost one-half mile from the Battery Energy Storage System. Based on this distance, impacts to Ridgway's Rail as a result of construction, operation and decommissioning of the Battery Energy Storage System are considered less than significant.</p>	LS	None required.	LS
<p>Impacts on Special Status Species – Birds (Greater Sandhill Crane)</p> <p>Impact 4.2.4 The Battery Energy Storage System is proposed on vacant, undeveloped land that has been disturbed in association with the Campo Verde Solar Project. No foraging habitat for Greater Sandhill Crane would be removed in association with construction, operation and decommissioning of the Project. Therefore, impacts to Greater Sandhill Crane are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Impacts on Special Status Species – Birds (MOPL)</p> <p>Impact 4.2.5 The Battery Energy Storage System is proposed on vacant land that has been disturbed in association with the Campo Verde Solar Project. No foraging habitat is present for the MOPL on the Battery Energy Storage System site. Therefore, impacts to MOPL during construction, operation and decommissioning of the Project are considered less than significant.</p>	LS	None required.	LS
<p>Impacts on Special Status Species – Raptors (BUOW)</p> <p>Impact 4.2.6 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project and does not contain features which would be suitable habitat for Burrowing owl. The potential exists for BUOW to be present along the Fern Canal and Westside Main canal. However, these features are set-back from the Battery Energy Storage System site. Therefore, impacts to BUOW during construction, operation and decommissioning are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/SIGNIFICANCE AFTER MITIGATION
<p>Impacts on Special Status Species – Raptors (Golden Eagles) Impact 4.2.7 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project. Suitable nesting habitat for Golden Eagle is not present within the Battery Energy Storage System site nor would foraging habitat be affected as a result of implementing the proposed Project. Therefore, impacts to Golden Eagles during construction, operation and decommissioning are considered less than significant.</p>	LS	None required.	LS
<p>Impacts on Special Status Species – Mammals (Pallid Bats and California Leaf-nosed Bats) Impact 4.2.8 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project. Implementation of the proposed Battery Energy Storage System would not remove suitable foraging habitat for Pallid bats and California leaf-nosed bats. Therefore, impacts to Pallid bats and California leaf-nosed bats during construction, operation and decommissioning are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Impacts on Special Status Species – Reptiles (FTHL)</p> <p>Impact 4.2.9 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project. As a result, no habitat for FTHL is present within the boundaries of the Battery Energy Storage System site. Therefore, impacts to FTHL during construction, operation and decommissioning are considered less than significant.</p>	LS	None required.	LS
<p>Substantial Adverse Effect on Riparian Habitat or Other Sensitive Natural Community</p> <p>Impact 4.2.10 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project and does not contain riparian habitat or special status communities. Therefore, no impact to riparian habitat or other sensitive natural community would occur in association with construction, operation or decommissioning of the Battery Energy Storage System.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Substantial Adverse Effect on Federally Protected Wetlands</p> <p>Impact 4.2.11 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project and does not contain any waters that are considered potentially jurisdictional. Therefore, no impact to federally protected wetlands would occur in association with construction, operation or decommissioning of the Battery Energy Storage System.</p>	LS	None required.	LS
<p>Interfere with Migratory Fish or Wildlife Movement/Impede Native Wildlife Nursery Sites</p> <p>Impact 4.2.12 The Battery Energy Storage System is proposed within the boundaries of the Campo Verde Solar Project. This area is currently surrounded by a chain-link fence that inhibits the ability of medium and large mammals to move through the site. No change in wildlife movement would occur in association with construction, operation or decommissioning of the proposed Project. Therefore, this impact is considered less than significant.</p>	LS	None required.	LS

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2.0 EXECUTIVE SUMMARY

**TABLE 2.0-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Conflict with Local Policies or Ordinances Protecting Biological Resources</p> <p>Impact 4.2.13 Implementation of the Battery Energy Storage System is not anticipated to conflict with any local policies or ordinances protecting biological resources during construction, operation or decommissioning. Therefore, this impact is considered less than significant.</p>	LS	None required.	LS
<p>Cumulative Impacts to Biological Resources</p> <p>Impact 4.2.14 Implementation of the proposed Battery Energy Storage System is included in the footprint of the Campo Verde Solar Project. Cumulative impacts on special status species, sensitive natural communities, and protected waters within the Campo Verde Solar Project site were previously assessed and mitigation measures were identified. No new impacts would occur as a result of the Battery Energy Storage System. Therefore, cumulative impacts are considered less than cumulatively considerable.</p>	LCC	None required.	LCC

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
CULTURAL RESOURCES			
<p>Impacts to Unrecorded Subsurface Archaeological Resources</p> <p>Impact 4.3.1 Unrecorded subsurface archaeological resources could be damaged during construction of the Battery Energy Storage System. This is considered a potentially significant impact.</p>	LS	None required.	LS
<p>Impacts to Subsurface Human Remains</p> <p>Impact 4.3.2 Subsurface human remains could be impacted during construction of the Battery Energy Storage System. This is considered a potentially significant impact.</p>	LS	None required.	LS
<p>Impacts to Fossil Remains</p> <p>Impact 4.3.3 Fossil remains could be destroyed by excavation and trenching associated with construction of the Battery Energy Storage System. This is considered a potentially significant impact.</p>	LS	None required.	LS

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<p>Cumulative Impacts to Archaeological Resources and Fossil Remains</p> <p>Impact 4.3.4 Implementation of the proposed Project, in combination with past, present and probable large-scale projects in the vicinity of the Campo Verde Battery Energy Storage System Project, has the potential to result in impacts to archaeological and historic resources. However, impacts are addressed on a project-by-project basis. Therefore, this is considered a less than cumulatively considerable impact.</p>	LS	None required.	LS
GEOLOGY & SOILS			
<p>Strong Seismic Ground Shaking</p> <p>Impact 4.4.1 The Project site is located in a seismically active region and would be subject to strong seismic ground shaking in the event of an earthquake. This is considered a potentially significant impact.</p>	PS	<p>MM 4.4.1 Phase 1 and Phase 2 of the proposed Battery Energy Storage System shall be designed in accordance with seismic considerations contained in the current California Building Code, Uniform Building Code or the standards of care established by the Structural Engineers Association of California and the County of Imperial building requirements.</p> <p><i>Timing/Implementation: Prior to approval of final building plans/As part of Project design.</i></p> <p><i>Enforcement/Monitoring: Imperial County Department of Planning and Development Services.</i></p>	LS

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		<p>MM 4.4.1b For structural designs based upon the 2012 International Building Code, the following criteria shall apply. The soil site class is D. S_s, the spectral acceleration for short periods, is 1.500g. S_1, the spectral acceleration for a 1-second period, is 0.600g. F_a and F_v, in accordance with Table 1613.3.3(1) and 1613.3.3(2) are 1.000 and 1.500, respectively.</p> <p><i>Timing/Implementation:</i> Prior to approval of final building plans/As part of project design.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Department of Planning and Development Services.</p>	
<p>Liquefaction/Unstable Soils</p> <p>Impact 4.4.2 Soils on the Project site could be subject to liquefaction as well as differential settlement if water infiltrates foundation soils. This is considered a potentially significant impact.</p>	<p>PS</p>	<p>MM 4.4.2a The structural design of foundations for Phase 1 and Phase 2 shall be based on the total post-liquefaction settlement varying from 0 to 1/2-inch at the site with 1/4-inch post-liquefaction differential settlement.</p> <p><i>Timing/Implementation:</i> Prior to approval of final building plans/As part of project design.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p>	<p>LS</p>

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IMPACT	LEVEL OF IMPACT/SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/SIGNIFICANCE AFTER MITIGATION						
		<p>MM 4.4.2b The final design of Phase 1 and Phase 2 foundations shall include proper drainage to inhibit water infiltration into foundation soils. Drainage shall also be properly managed during construction to avoid water infiltration from any source.</p> <p><i>Timing/Implementation:</i> Prior to approval of final building plans/during construction of Phase 1 and Phase 2 foundations.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p> <p>MM 4.4.2c Phase 1 and Phase 2 shall be designed in accordance with the following alternative footing depths and allowable net bearing capacities:</p> <table border="1" data-bbox="1199 1128 1768 1271"> <thead> <tr> <th>Footing Depth Below Finished Grade (ft) ¹</th> <th>Allowable Bearing Capacity (psf)</th> </tr> </thead> <tbody> <tr> <td align="center">1.5</td> <td align="center">2000</td> </tr> <tr> <td align="center">2.0</td> <td align="center">2500</td> </tr> </tbody> </table> <p><small>Source: WTI 2016a, pp. 6-7. Finished grade is the lowest adjacent grade for perimeter footings and floor level for interior footings</small></p>	Footing Depth Below Finished Grade (ft) ¹	Allowable Bearing Capacity (psf)	1.5	2000	2.0	2500	
Footing Depth Below Finished Grade (ft) ¹	Allowable Bearing Capacity (psf)								
1.5	2000								
2.0	2500								

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IMPACT	LEVEL OF IMPACT/SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/SIGNIFICANCE AFTER MITIGATION
		<p>The allowable bearing capacities shall apply to dead loads plus design live load conditions. Minimum widths of column and wall footings shall be 24 inches and 16 inches, respectively. A one-third increase in the bearing capacity is allowable for wind or seismic loads.</p> <p><i>Timing/Implementation:</i> Prior to approval of final building plans/As part of project design.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p> <p>MM 4.4.2d All footings shall be reinforced to reduce the potential for distress caused by differential foundation movements.</p> <p><i>Timing/Implementation:</i> During construction/As part of project design.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p>	

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
		<p>MM 4.4.2e The geotechnical engineer or geotechnical engineer’s representative shall observe the footing excavations prior to placing reinforcing steel and pouring concrete foundations to assess whether the soils exposed are similar to those anticipated for support of the footings. Any soft, loose, or unacceptable soils shall be undercut to suitable materials and backfilled with approved fill materials or lean concrete. Soil backfill shall be properly compacted.</p> <p><i>Timing/Implementation: Prior to placing reinforcing steel and pouring concrete foundations/Geotechnical engineer or geotechnical engineer’s representative.</i></p> <p><i>Enforcement/Monitoring: Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i></p>	

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		<p>MM. 4.4.2f Slabs-on-grade shall be designed using a modulus of subgrade reaction (k) of 225 pounds per cubic inch (pci) for the on-site soil and imported fill material based on the soil classification. The slab subgrade shall be prepared in accordance with procedures outlined in the Geotechnical Evaluation Report (WTI 2016a). A minimum 4-inch layer of base course should be provided beneath all slabs to help prevent capillary rise and a damp slab.</p> <p><i>Timing/Implementation: Prior to approval of final building plans/As part of project design.</i></p> <p><i>Enforcement/Monitoring: Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i></p>	

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
		<p>MM 4.4.2g All concrete placement and curing operations shall follow the American Concrete Institute manual recommendations. Improper curing techniques and/or high slump (high water-cement ratio) could cause excessive shrinkage, cracking or curling. Concrete slabs shall be allowed to cure adequately before placing vinyl or other moisture sensitive floor covering.</p> <p><i>Timing/Implementation: Prior to approval of final building plans/During concrete placement and curing.</i></p> <p><i>Enforcement/Monitoring: Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i></p>	

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		<p>MM 4.4.2h In areas where sidewalks or paving do not immediately adjoin the structures of the proposed Phase 1 and Phase 2 of the Battery Energy Storage System Project, protective slopes shall be provided with an outfall of 5 percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility trenches shall be well-compacted and free of all construction debris to minimize the possibility of moisture infiltration.</p> <p><i>Timing/Implementation:</i> Prior to approval of final building plans/During construction.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p>	
<p>Erosion</p> <p>Impact 4.4.3 Construction of the proposed Battery Energy Storage System would result in ground disturbance and potential for erosion and loss of top soil. Multiple requirements have been established to address erosion during construction, operation and decommissioning of the proposed Project. Therefore, erosion impacts are considered less than significant.</p>	<p>LS</p>	<p>None required.</p>	<p>LS</p>

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Expansive Soils</p> <p>Impact 4.4.4 Soils on the Project site were tested to determine whether expansive characteristics were present. The soils had an expansion index value of zero and may be characterized as low expansive. Therefore, expansive soils impacts associated with construction, operation and decommissioning of the Battery Energy Storage System are considered less than significant.</p>	LS	None required.	LS
<p>Soil Corrosivity</p> <p>Impact 4.4.5 Soils within the Project site were tested for corrosivity. While the soils do not contain properties that would be corrosive to concrete, metal structures coming in contact with Project site soils could be damaged. This is considered a potentially significant impact.</p>	PS	<p>MM 4.4.5 A corrosion expert shall be part of the Project design team to prepare recommendations for corrosion protection of buried utilities and conduits. Buried metal piping or other conduits shall be protected from direct contact with the soil. Special protection shall be implemented where dissimilar metals are placed in close proximity or are joined.</p> <p><i>Timing/Implementation: Prior to issuance of building permit/during construction.</i></p> <p><i>Enforcement/Monitoring: Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i></p>	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
HAZARDS AND HAZARDOUS MATERIALS			
<p>Hazardous Materials Transport, Use, Disposal and Accidental Release Impact 4.5.1 The proposed Project would involve the transport, use, and disposal of hazardous materials in association with construction, operation and decommissioning. However, all materials would be transported, used and disposed of in accordance with all applicable local, state and federal requirements. Therefore, impacts associated with accidental release during hazardous materials transport, use and disposal are considered less than significant.</p>	LS	None required.	LS
<p>Hazard Through Upset/Release of Hazardous Materials Impact 4.5.2 The proposed Project site was historically farmed but is now part of the Campo Verde Solar Project. The Phase I ESA prepared for the Campo Verde Solar Project did not identify the use of pesticides as a Recognized Environmental Condition. The Project as proposed includes safety features to reduce potential for leaks and fires. Therefore, impacts through upset/release of hazardous materials are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Cumulative Hazards and Hazardous Materials Impact</p> <p>Impact 4.5.3 The proposed Battery Energy Storage System, in combination with other Past, Present and Probable Large-Scale Projects in the vicinity of the Campo Verde Battery Energy Storage System, would not increase the density of development in the area because no other cumulative projects are within the cumulative geographic scope. Thus, the proposed Project's contribution to cumulative hazards and hazardous materials impacts is considered less than cumulatively considerable.</p>	LCC	None required.	LCC

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IMPACT	LEVEL OF IMPACT/SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/SIGNIFICANCE AFTER MITIGATION
NOISE			
<p>Noise Levels in Excess of Standards/Substantial Temporary Noise Increase</p> <p>Impact 4.6.1 Heavy equipment and traffic generated during construction would generate short-term increases in noise on and in the vicinity of the Project site. However, based on the number of pieces of equipment and distance to the property line, as well as the low Phase 1 and Phase 2 construction traffic volumes, noise levels would not exceed County standards. Therefore, impacts associated with noise levels in excess of standards or a substantial temporary noise increase as a result of Phase 1 and Phase 2 Project construction are considered less than significant.</p>	LS	None required.	LS

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<p>Exposure to Excessive Groundborne Vibration or Groundborne Noise</p> <p>Impact 4.6.2 Construction of the proposed Project would result in some groundborne vibration caused by heavy equipment. However, vibration levels would not exceed FTA thresholds and no residential structures are located in the vicinity of the Project to suffer damage or annoyance. Therefore, Project impacts associated with excessive groundborne vibration or groundborne noise are considered less than significant.</p>	LS	None required.	LS
<p>Noise Levels in Excess of Standards/Substantial Permanent Noise Increase</p> <p>Impact 4.6.3 Operational noise would be generated by the HVAC units proposed as part of Phase 1 and Phase 2 of the Battery Energy Storage System. However, the noise levels generated would not exceed the County's Property Line Noise Limits. Therefore, the proposed Project would result in a less than significant impact with regard to noise levels in excess of standards or a substantial permanent noise level increase.</p>	LS	None required.	LS

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<p>Cumulative Project-Related Noise Impacts</p> <p>Impact 4.6.4 Construction of Phase 1 and Phase 2 of the Battery Energy Storage System would contribute construction traffic to area roadways. However, the increase in traffic noise would be less than cumulatively considerable. The Project would not generate any operational noise, traffic noise or groundborne vibration noise. Decommissioning noise impacts would be similar to those of Project construction. Therefore, cumulative Project-related noise impacts are considered less than cumulatively considerable.</p>	LCC	None required.	LCC

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TRANSPORTATION AND CIRCULATION			
<p>Impacts to Intersection and Roadway Segment LOS (Year 2016 Plus Project) Impact 4.7.1 Implementation of the proposed Project would add Phase 1 construction traffic to existing traffic volumes on the study area intersection and roadways. The one intersection and three roadway segments are currently operating at LOS A and would remain unchanged with the addition of Phase 1 construction trip generation. Therefore, impacts to LOS in Year 2016 are considered less than significant.</p>	LS	None required.	LS
<p>Impacts to Intersection and Roadway Segment LOS (Year 2018 Conditions) Impact 4.7.2 Implementation of the proposed Project would add Phase 2 construction traffic to existing traffic volumes on the study area intersection and roadways. The one intersection and three roadway segments are currently operating at LOS A and would remain unchanged with the addition of Phase 2 construction trip generation. Therefore, impacts to LOS in Year 2018 are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Increase in Hazards Due to a Design Feature or Incompatible Uses</p> <p>Impact 4.7.3 No changes in the existing circulation network or access would occur as a result of implementation of the Battery Energy Storage System. Based on the Project’s location in a rural portion of Imperial County with low traffic volumes, it is not considered an incompatible use with surrounding agricultural land. Therefore, no impact would occur in association with hazards due to a design feature or incompatible uses.</p>	LS	None required.	LS
<p>Emergency Access</p> <p>Impact 4.7.4 One access to the Project site is available off of Liebert Road. This access also serves the Campo Verde Substation. The Imperial County Fire Department will require that all fire apparatus access roads are properly designed to accommodate emergency access. Therefore, impacts associated with emergency access are considered less than significant.</p>	LS	None required.	LS

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Cumulative Impacts to Intersection and Segment LOS (Existing Year 2016)</p> <p>Impact 4.7.5 The proposed Project's construction traffic in combination with Year 2016 volumes would add traffic to the study area intersection and three roadway segments during peak construction. The intersection and segments are currently operating at LOS A and would not decline below LOS C with the addition of cumulative traffic. This impact is considered less than cumulatively considerable.</p>	LCC	None required.	LCC
<p>Cumulative Impacts to Intersection and Segment LOS (Near-Term Year 2018)</p> <p>Impact 4.7.6 The proposed Project's construction traffic in combination with Year 2018 volumes would add traffic to the study area intersection and roadway segments during peak construction. The intersection and three roadway segments are currently operating at LOS A and will continue to do so with the addition of cumulative traffic. This impact is considered less than cumulatively considerable.</p>	LCC	None required.	LCC

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IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
<p>Cumulative Impacts to Intersection and Segment LOS (Decommissioning Year 2038)</p> <p>Impact 4.7.7 The proposed Project’s decommissioning traffic in combination with Year 2038 volumes would add traffic to the study area intersection and roadway segments during peak construction. The intersection and three roadway segments are currently operating at LOS A and would continue to do so with the addition Year 2038 plus decommissioning traffic. This impact is considered less than cumulatively considerable.</p>	LCC	None required.	LCC

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CHAPTER 3.0

ERRATA

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3.1 INTRODUCTION

This Errata has been prepared to correct minor errors in the text of the Draft SEIR for the Campo Verde Battery Energy Storage System Project (proposed project) which was circulated for a 45-day public review period in compliance with Public Resources Code 21091 from October 13, 2016 through November 28, 2016.

The minor modifications to the text of the Draft EIR set forth in this chapter provide clarification that does not: 1) constitute significant new information; 2) change to the project or environmental setting; 3) result in any new significant environmental impacts; and, 4) change any of the impact conclusions of the Draft SEIR. In addition, these minor revisions to the text, as described below, would not cause a substantial increase in the severity of any environmental impacts. Rather, these changes merely clarify and correct spelling or typographical errors in portions of the text. Amended text is identified by page number. Clarifications to the Draft SEIR text are shown with underline and text removed from the Draft EIR is shown with ~~striketrough~~.

3.2 CHANGES AND EDITS TO THE DRAFT SEIR

The following changes and edits represent revisions to information included in the Draft SEIR based upon typographical errors. Given the minor changes associated with the document, the information added to the SEIR does not meet the requirements for recirculation pursuant to CEQA Guidelines § 150885.5.

A brief description of what the change or edit is provided as well as a reference to where the change or edit occurs in the document (page number, paragraph, sentence, table, etc). Changes to the portion of text are included in quotes (“”).

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EXECUTIVE SUMMARY

Page ES-5, Table ES-1 Summary of Impacts, Impact 4.1.1 has been revised to incorporate a minor change in wording as follows:

**TABLE ES-1
SUMMARY OF IMPACTS**

IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
AIR QUALITY/GREENHOUSE GAS EMISSIONS			
<p>Conflict With or Obstruct Air Quality Plan Impact 4.1.1 Implementation of the proposed Project would increase air pollutant emissions, but would not exceed ICAPCD thresholds. Therefore, impacts with regard to obstructing <u>obstruction</u> of an air quality plan are considered less than significant.</p>	LTS	None required.	Not applicable.

Page ES-6, Table ES-1 Summary of Impacts, Impact 4.1.3 has been revised to incorporate a minor change in wording as follows:

<p>Result in Cumulatively Considerable Net Increase of Criteria Pollutant Impact 4.1.3 The proposed Project would generate criteria pollutant emissions during construction. However, the Project would not exceed ICAPCD emission threshold levels. Therefore, the proposed Project would result in a less than cumulatively considerable impact with regard to a cumulatively considerable net increase of <u>a</u> criteria pollutant.</p>	LCC	None required.	Not applicable.
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3.0 ERRATA

Page ES-9, Table ES-1 Summary of Impacts, Impact 4.2.5 has been revised to incorporate a minor change in wording as follows:

<p>Impacts on Special Status Species – Birds (MOPL) Impact 4.2.5 The Battery Energy Storage System is proposed on vacant land that has been disturbed in association with the Campo Verde Solar Project. No foraging habitat is present for the MOPL <u>on</u> the Battery Energy Storage System site. Therefore, impacts to MOPL during construction, operation and decommissioning of the Project are considered less than significant.</p>	LTS	None required.	Not applicable .
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Page ES-11, Table ES-1 Summary of Impacts, Impact 4.2.9 has been revised to incorporate a minor change in wording as follows:

<p>Impacts on Special Status Species – Reptiles (FTHL) Impact 4.2.9 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project. As a result, no habitat for FTHL is present within the boundaries of the Battery Energy Storage System site. Therefore, impacts to this FTHL during construction, operation and decommissioning are considered less than significant.</p>	LTS	None required.	Not applicable .
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Page ES-24, Table ES-1 Summary of Impacts, MM 4.4.2h has been revised to incorporate a minor change in wording as follows:

IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
	PS	<p>MM 4.4.2h In areas where sidewalks or paving do not immediately adjoin the structures of the proposed Phase 1 and Phase 2 of the <u>Battery Energy Storage System</u> Project, protective slopes shall be provided with an outfall of 5 percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility trenches shall be well-compacted and free of all construction debris to minimize the possibility of moisture infiltration.</p> <p><i>Timing/Implementation: Prior to approval of final building plans/During construction.</i></p> <p><i>Enforcement/Monitoring: Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i></p>	LTS

3.0 ERRATA

Page ES-25, Table ES-1 Summary of Impacts, MM 4.4.5

IMPACT	LEVEL OF IMPACT/ SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF IMPACT/ SIGNIFICANCE AFTER MITIGATION
	PS	<p>MM 4.4.5 A corrosion expert shall be part of the Project design team to prepare recommendations for corrosion protection of buried utilities and conduits. Buried metal piping or other conduits in contact with the native soils shall be protected from direct contact with the soil. Special protection shall be implemented where dissimilar metals are placed in close proximity or are joined.</p> <p><i>Timing/Implementation:</i> Prior to issuance of building permit/during construction.</p> <p><i>Enforcement/Monitoring:</i> Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</p>	LTS

CHAPTER 1.0 - INTRODUCTION

No revisions.

CHAPTER 2.0 - PROJECT DESCRIPTION

Page 1.0-4, the second paragraph under C. Public Notice/Public Review has been revised to reflect the correct starting date of the public review period as follows:

“On October ~~23~~ 13, 2016 a NOC was filed with the State Clearinghouse for the Draft SEIR, initiating the 45-day public review period of the Draft SEIR document and associated technical appendices. The public review period on the Draft SEIR ends on

November 28, 2016 after which time all comments received will be responded to (refer to item D, "Response to Comments/Final EIR," below).

CHAPTER 3.0 - INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

No revisions.

CHAPTER 4.0 - ENVIRONMENTAL ANALYSIS

No revisions.

SECTION 4.1 - AIR QUALITY/GREENHOUSE GAS EMISSIONS

Page 4.1-15, Impact 4.1.1 has been revised to incorporate a minor change in wording as follows:

"Conflict With or Obstruct Air Quality Plan

Impact 4.1.1 Implementation of the proposed Project would increase air pollutant emissions, but would not exceed ICAPCD thresholds. Therefore, impacts with regard to ~~obstructing~~ obstruction of an air quality plan are considered **less than significant.**"

Page 4.1-17, Impact 4.1.3 has been revised to incorporate a minor change in wording as follows:

"Result in Cumulatively Considerable Net Increase of Criteria Pollutant

Impact 4.1.3 The proposed Project would generate criteria pollutant emissions during construction. However, the Project would not exceed ICAPCD emission threshold levels. Therefore, the proposed Project would result in a **less than cumulatively considerable impact** with regard to a cumulatively considerable net increase of a criteria pollutant."

SECTION 4.2 – BIOLOGICAL RESOURCES

Page 4.2-28, Impact 4.2.5 has been revised to incorporate a minor change in wording as follows:

"Impacts on Special Status Species – Birds (MOPL)

Impact 4.2.5 The Battery Energy Storage System is proposed on vacant land that has been disturbed in association with the Campo Verde Solar Project. No foraging habitat is present for the MOPL on the Battery Energy Storage System site. Therefore, impacts to MOPL during construction, operation and decommissioning of the Project are considered **less than significant.**"

Page 4.2-31, Impact 4.2.9 has been revised to incorporate a minor change in wording as follows:

"Impacts on Special Status Species – Reptiles (FTHL)

Impact 4.2.9 The Battery Energy Storage System site has been disturbed in association with development of the Campo Verde Solar Project. As a result, no habitat for FTHL is present within the boundaries of the Battery Energy Storage System site. Therefore, impacts to ~~this~~ FTHL during construction, operation and decommissioning are considered **less than significant.**

3.0 ERRATA

4.3 CULTURAL RESOURCES

No revisions.

4.4 GEOLOGY AND SOILS

No revisions.

4.5 HAZARDS AND HAZARDOUS MATERIALS

No revisions.

4.6 NOISE

No revisions.

4.7 TRANSPORTATION AND CIRCULATION

No revisions.

5.0 CUMULATIVE IMPACTS SUMMARY

No revisions.

6.0 ALTERNATIVES

No revisions.

7.0 OTHER CEQA REQUIRED CONSIDERATIONS

No revisions.

8.0 LIST OF PREPARERS

No revisions.

9.0 REFERENCES

CHAPTER 4.0

MITIGATION MONITORING AND REPORTING PROGRAM

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4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for the Campo Verde Battery Energy Storage System. This FMMRP has been prepared pursuant to California Public Resources Code §21081.6, which requires public agencies to “adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” An FMMRP is required for the proposed project because the Draft Supplemental EIR (Draft SEIR) identified significant adverse impacts and mitigation measures have been identified to address these impacts. The numbering of the individual mitigation measures follows the numbering sequence as found in the Draft SEIR. All staff-initiated revisions to correct minor typographical or grammatically errors have been incorporated into this FMMRP.

4.2 MITIGATION MONITORING AND REPORTING PROGRAM

The FMMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final SEIR. The County of Imperial will be the primary agency, but not the only agency, responsible for implementing the mitigation measures. In some cases, other public agencies will implement measures. In other cases, the project applicant will be responsible for implementation of measures and the County’s role is exclusively to monitor the implementation of the measures. In such cases, the project applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The County will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The FMMRP is presented in tabular form on the following pages. The components of the FMMRP are described briefly below:

Mitigation Measures: The mitigation measures are copied from the Draft SEIR, in the same order that they appear in the Draft SEIR. The FMMRP contains minor revisions to mitigation measures to correct minor typographical or grammatically errors.

Mitigation Timing: Identifies at which stage of the project the mitigation must be completed.

Monitoring Responsibility: Identifies the department within the County, project applicant, or consultant responsible for mitigation monitoring.

Compliance Verification Responsibility: Identifies the department of the County or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

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MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
CULTURAL RESOURCES				
MM 4.3.1	If subsurface deposits believed to be cultural in origin are discovered during construction, all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist shall be retained to evaluate the significance of the find. A Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required. Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR. If a potentially-eligible resource is encountered, then the archaeologist, lead agency, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility for the CRHR and, if eligible, data recovery as mitigation.	<i>Qualified archaeologist and Imperial County Department of Planning and Development Services.</i>	<i>During construction and decommissioning/ Field monitor, Qualified Archaeologist, if necessary.</i>	
MM 4.3.2	In the event that evidence of human remains is discovered, construction activities within 200 feet of the discovery shall be halted or diverted and the Imperial County Coroner will be notified (Section 7050.5 of the Health and Safety Code). If the Coroner determines that the remains are Native American, the Coroner will notify the Native American Heritage Commission which will designate a Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).	<i>During construction and decommissioning/ Field Monitor, Imperial County Coroner, if necessary.</i>	<i>Applicant, Imperial County Department of Planning and Development Services, Imperial County Coroner.</i>	

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>MM 4.3.3</p>	<p>Ground-disturbing activities in the Lake Cahuilla sediments, Quaternary alluvium, and the Brawley Formation must be monitored by a qualified paleontological monitor. Paleontological monitors will be equipped to salvage fossils as they are unearthed (to help avoid construction delays) and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors are empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens will be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Fossil specimens will be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontological resources.</p>	<p><i>Applicant and Imperial County Department of Planning and Development Services.</i></p>	<p><i>During construction and decommissioning of Phase 1 and Phase 2/ Qualified Paleontological Monitor.</i></p>	
<p>GEOLOGY AND SOILS</p>				
<p>MM 4.4.1a</p>	<p>Phase 1 and Phase 2 of the proposed Battery Energy Storage System shall be designed in accordance with seismic considerations contained in the current California Building Code, Uniform Building Code or the standards of care established by the Structural Engineers Association of California and the County of Imperial building requirements.</p>	<p><i>Imperial County Department of Planning and Development Services.</i></p>	<p><i>Prior to approval of final building plans/As part of Project design.</i></p>	
<p>MM 4.4.1b</p>	<p>For structural designs based upon the 2012 International Building Code, the following criteria shall apply. The soil site class is D. S₁, the spectral acceleration for short periods, is 1.500g. S₁, the spectral acceleration for a 1-second period, is 0.600g. F_a and F_v, in accordance with Table 1613.3.3(1) and 1613.3.3(2) are 1.000 and 1.500, respectively.</p>	<p><i>Imperial County Department of Planning and Development Services.</i></p>	<p><i>Prior to approval of final building plans/As part of project design.</i></p>	

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)						
MM 4.4.2a	The structural design of foundations for Phase 1 and Phase 2 shall be based on the total post-liquefaction settlement varying from 0 to 1/2-inch at the site with 1/4-inch post-liquefaction differential settlement.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/As part of project design.</i>							
MM 4.4.2b	The final design of Phase 1 and Phase 2 foundations shall include proper drainage to inhibit water infiltration into foundation soils. Drainage shall also be properly managed during construction to avoid water infiltration from any source.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/during construction of Phase 1 and Phase 2 foundations.</i>							
MM 4.4.2c	<p>Phase 1 and Phase 2 shall be designed in accordance with the following alternative footing depths and allowable net bearing capacities:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Footing Depth Below Finished Grade (ft) ¹</th> <th style="text-align: center;">Allowable Bearing Capacity (psf)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.5</td> <td style="text-align: center;">2000</td> </tr> <tr> <td style="text-align: center;">2.0</td> <td style="text-align: center;">2500</td> </tr> </tbody> </table> <p>Source: WTI 2016a, pp. 6-7. Finished grade is the lowest adjacent grade for perimeter footings and floor level for interior footings. The allowable bearing capacities shall apply to dead loads plus design live load conditions. Minimum widths of column and wall footings shall be 24 inches and 16 inches, respectively. A one-third increase in the bearing capacity is allowable for wind or seismic loads.</p>	Footing Depth Below Finished Grade (ft) ¹	Allowable Bearing Capacity (psf)	1.5	2000	2.0	2500	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/As part of project design.</i>	
Footing Depth Below Finished Grade (ft) ¹	Allowable Bearing Capacity (psf)									
1.5	2000									
2.0	2500									

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.4.2d	All footings shall be reinforced to reduce the potential for distress caused by differential foundation movements.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>During construction/As part of project design.</i>	
MM 4.4.2e	The geotechnical engineer or geotechnical engineer's representative shall observe the footing excavations prior to placing reinforcing steel and pouring concrete foundations to assess whether the soils exposed are similar to those anticipated for support of the footings. Any soft, loose, or unacceptable soils shall be undercut to suitable materials and backfilled with approved fill materials or lean concrete. Soil backfill shall be properly compacted.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to placing reinforcing steel and pouring concrete foundations/ Geotechnical engineer or geotechnical engineer's representative.</i>	
MM 4.4.2f	Slabs-on-grade shall be designed using a modulus of subgrade reaction (k) of 225 pounds per cubic inch (pci) for the on-site soil and imported fill material based on the soil classification. The slab subgrade shall be prepared in accordance with procedures outlined in the Geotechnical Evaluation Report (WTI 2016a). A minimum 4-inch layer of base course should be provided beneath all slabs to help prevent capillary rise and a damp slab.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/As part of project design.</i>	

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.4.2g	All concrete placement and curing operations shall follow the American Concrete Institute manual recommendations. Improper curing techniques and/or high slump (high water-cement ratio) could cause excessive shrinkage, cracking or curling. Concrete slabs shall be allowed to cure adequately before placing vinyl or other moisture sensitive floor covering.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/During concrete placement and curing.</i>	
MM 4.4.2h	In areas where sidewalks or paving do not immediately adjoin the structures of the proposed Phase 1 and Phase 2 of the Battery Energy Storage System Project, protective slopes shall be provided with an outfall of 5 percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility trenches shall be well-compacted and free of all construction debris to minimize the possibility of moisture infiltration.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to approval of final building plans/During construction.</i>	
MM 4.4.5	A corrosion expert shall be part of the Project design team to prepare recommendations for corrosion protection of buried utilities and conduits. Buried metal piping or other conduits shall be protected from direct contact with the soil. Special protection shall be implemented where dissimilar metals are placed in close proximity or are joined.	<i>Imperial County Public Works Department, Engineering Division/Imperial County Department of Planning and Development Services.</i>	<i>Prior to issuance of building permit/during construction.</i>	

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