

A. Introduction

On October 25, 2013, Southern California Edison (SCE or “the Applicant”) submitted Application A.13-10-020 seeking a Certificate of Public Convenience and Necessity (CPCN) for the West of Devers (WOD) Upgrade Project (Proposed Project) from the California Public Utilities Commission (CPUC). Because the proposed transmission line would cross approximately 3.5 miles of federal land managed by the Bureau of Land Management (BLM), the project would also require a Right-of-Way (ROW) Grant from the BLM for the portion of the project across BLM-administered land. SCE submitted a ROW Application to the BLM in March 2013. Since a portion of the Proposed Project would cross Trust Land on the Morongo Indian Reservation, the project would require a ROW grant from the Bureau of Indian Affairs (BIA).

This Final Environmental Impact Statement (EIS) has been prepared by the U.S. Department of the Interior, BLM under the National Environmental Policy Act (NEPA) to inform the public and to meet the needs of local, State, and federal permitting agencies to consider the Proposed Project as described by SCE and project alternatives. Under NEPA, BIA will be a Cooperating Agency. The CPUC published a separate Final Environmental Impact Report (EIR) for compliance with the California Environmental Quality Act (CEQA) on December 11, 2015. The application includes a Proponent’s Environmental Assessment (PEA) that contains SCE’s own analysis. The Proposed Project is described in detail in Section B of this EIS. This EIS does not make a recommendation regarding the approval or denial of the project; it is purely informational and will be used by the BLM in considering whether to approve the Proposed Project or an alternative analyzed in this EIS.

This EIS evaluates and presents the environmental impacts that are expected to result from construction and operation of SCE’s proposed WOD Upgrade Project, and presents recommended mitigation measures that, if adopted, would avoid or minimize many of the significant environmental impacts identified. In accordance with NEPA requirements, this EIS also identifies alternatives to the Proposed Project (including the No Action Alternative) that could avoid or minimize significant environmental impacts associated with the project as proposed by SCE, and evaluates the environmental impacts associated with these alternatives. Based on this environmental impact assessment, as well as the relative sensitivities of impacts in the study region, this EIS identifies the Environmentally Preferred Alternative, as required by NEPA.

The contents of the Draft EIR/EIS, which was published by the CPUC and BLM on August 7, 2015, reflects input by government officials, agencies, nongovernmental organizations, and members of the public during the EIR/EIS scoping period following the CPUC’s publication of the Notice of Preparation (NOP) of an EIR/EIS (May 12, 2014) and the BLM’s publication of the Notice of Intent (NOI) (July 1, 2014). During these comment periods, several public involvement activities were completed: distribution of the NOP, NOI, and a scoping meeting notice, establishment of an Internet web page and a telephone hotline, 5 public scoping meetings (May and July 2014), meetings with a number of affected local jurisdictions, and publication of a CPUC scoping report and a BLM scoping report (see details in Section I, Public Participation and Consultation). Consultation with agencies also continued after the formal scoping period ended. Following publication of the Draft EIR/EIS, a public comment period was held from August 7 to September 22, 2015. This Final EIS presents comments that were submitted on the Draft EIR/EIS, along with responses to all comments.

The remainder of this section is organized as follows: Section A.1 summarizes the history and provides an overview of the Proposed Project; Section A.2 outlines the purpose and need for the Proposed Project as defined by SCE; Section A.3 identifies Connected Actions and related projects; Section A.4 describes agency use of the EIS, and includes a brief description of the CPUC, BLM, BIA, and other agencies’ processes for consideration of project approval, and Section A.5 presents a Reader’s Guide to this EIS, explaining how it is organized.

A.1 History and Overview of Proposed Project

A.1.1 Overview

The Proposed Project would upgrade SCE's existing WOD system in a number of ways. The upgrades to the existing 220 kilovolt (kV) transmission lines would be the most visible components of the project. These upgrades would occur on approximately 30 miles of the Devers–El Casco 220 kV transmission line, 14 miles of the El Casco–San Bernardino line, 43 miles of the Devers–San Bernardino line, 45 miles of the Devers-Vista No. 1 and No. 2 lines, 3.5 miles of the Etiwanda–San Bernardino line, and 3.5 miles of the San Bernardino–Vista line. The Proposed Project would replace or upgrade the existing 220 kV transmission lines and structures between Devers, El Casco, San Bernardino, and Vista Substations to increase the system transfer capacity from 1,600 megawatts (MW) to 4,800 MW.

A.1.2 Project History: DPV2 and 2005 West of Devers Proposal

The history of the Proposed Project begins with a previous proposal by SCE to upgrade the lines in the WOD system. On April 11, 2005, SCE submitted an application (A.05-04-015) for a CPCN for a 500 kV interstate transmission line project, the Devers–Palo Verde No. 2 (DPV2) Project. The DPV2 project included three major components:

- A 500 kV line from the Palo Verde area in Arizona to a new substation near Blythe, California;
- A 500 kV line from the Blythe area substation to the Devers Substation; and
- Upgrades to SCE's lower voltage transmission system west of the Devers Substation.

The CPUC approved the DPV2 Project in January 2007 in Decision D.07-01-040. The approved DPV2 Project included the SCE proposal except for the West of Devers segment, which was replaced by the Devers to Valley 500 kV No. 2 Transmission Line Alternative (as explained in Section A.1.3).

On May 14, 2008, SCE filed a Petition for Modification (PFM) of the CPCN approved per Decision D.07-01-040. In the PFM, SCE requested that the CPUC authorize SCE to construct DPV2 facilities in only the California portion of DPV2 and the Midpoint Substation (later re-named as the Colorado River Substation) near Blythe, California. The CPUC approved SCE's PFM on November 20, 2009 in Decision D.09-11-007. The BLM issued its Record of Decision approving the project on July 19, 2011. Construction of the DPV2 Project began in June 2011 and its 500 kV transmission lines were energized in September 2013.

A.1.3 Morongo Tribal Land History and Background

As discussed in Section A.1.2, the West of Devers components, as proposed by SCE in 2005 as part of the DPV2 Project, could not be approved by the CPUC and BLM because by the time of agency decisions (January 2007), the Morongo Band of Mission Indians had not reached an agreement with SCE on terms of the ROW renewal for the transmission corridor that crossed tribal land. Therefore, the Devers Substation to Valley Substation (Devers-Valley No. 2 500 kV) alternative route was approved instead. Although the West of Devers upgrades reviewed in 2006 were legally infeasible to build at the time, the 2006 Final EIR/EIS for DPV2 found the West of Devers proposal to be environmentally superior to the Devers-Valley No. 2 500 kV alternative that was built and is now in use.

On November 27, 2012, SCE and the Morongo entered into an agreement, called “Agreement Related to Grant Easements and Rights-of-Way for Electric Transmission Lines and Appurtenant Fiber-Optic Telecommunications Lines and Access Roads On and Across Lands of the Morongo Indian Reservation” (ROW agreement). In this ROW agreement, the Morongo consented to the grants to SCE. The BIA approved the grants of certain easements and rights of way on and across the lands of the Morongo Indian reservation. Pursuant to the Agreement, the rights of way and easements necessary for SCE to continue operating its existing 220 kV facilities on the Morongo reservation and to replace and upgrade those facilities with the WOD Project for 50 years. This 2012 ROW agreement between SCE and the Morongo Tribe would permit SCE to construct the portion of the Proposed Project that crosses the tribal land. However, the replacement and upgrade project is subject to BIA approval.

The Proposed Project would cross approximately 8 miles of the reservation Trust Lands of the Morongo. Based on the SCE-Morongo ROW agreement, approximately 3 miles of existing WOD ROW would be abandoned and replaced with a new 3-mile alignment. SCE would apply to the BIA for the grant of ROW across the new 3-mile alignment and Morongo would consent to SCE’s application¹ for a new 50-year ROW Agreement, as is also discussed in Section A.3.3.

As part of the ROW agreement, on November 27, 2012, SCE also entered into a Development and Coordination Agreement (DCA) with Morongo Transmission LLC² that provides Morongo Transmission the option to invest up to \$400 million at the time of commercial operation in exchange for 30-year lease rights to a pro rata portion of the proposed facilities. SCE has stated that this investment option was a key factor in the negotiation of a new ROW agreement that allows the Proposed Project be built across the Morongo tribal-trust lands. However, Morongo Transmission’s transmission transfer capability rights lease is contingent upon receipt of regulatory approvals from the Federal Energy Regulatory Commission (FERC)³ and the CPUC. Under the terms of the ROW agreement, if such FERC and CPUC regulatory approvals are not obtained, the Morongo Tribe would have the right to terminate the ROW agreement. SCE stated in its response to Data Request 7 (SCE, 2014: Response to ALT-6):

Pursuant to the terms of the ROW Agreement, the Morongo have the right to terminate the ROW Agreement if either the Proposed Transaction between SCE and Morongo Transmission is not approved, or if SCE is unable to obtain a CPCN for the WOD Upgrade Project. As such, if the WOD Upgrade Project is not approved and the Morongo terminate the ROW Agreement, SCE would not have the necessary property rights to continue operating the existing WOD transmission facilities and other SCE facilities that traverse the Reservation.

The Morongo Tribe lease for SCE’s existing 150-foot-wide Devers-Vista No. 1 ROW expired in 2010 and the lease for the 300-foot ROW expires in 2019. As a result, if the WOD Upgrade Project is not approved SCE would not have the necessary property rights to continue operating the existing Devers-Vista No. 1 transmission facilities on tribal land, since that agreement has already expired. SCE’s rights to operate the 300-foot ROW would expire in 2019, and because SCE does not have the power of eminent domain over the Morongo trust lands, the Morongo would be able to terminate that ROW Agreement at that time. If

¹ Pursuant to 25 U.S.C. § 81.

² Morongo Transmission LLC is a venture between the Morongo Band of Mission Indians and Coachella Partners LLC, a Delaware limited liability company formed for the purposes of the Proposed Transaction, for which the Morongo Tribe owns the majority of interest.

³ On May 31, 2013, SCE and Morongo Transmission filed a joint application at FERC pursuant to Section 203 of the Federal Power Act requesting authorization to lease transfer capability in a portion of the WOD-UP by SCE to Morongo Transmission. On September 3, 2013, FERC issued Order Authorizing Disposition of Jurisdictional Facilities, 144 FERC 61,178 (2013) granting SCE’s and Morongo Transmission’s joint 203 Application, as being consistent with the public interest.

this occurs, SCE would be required to remove the existing WOD transmission lines that traverse the reservation and relocate such facilities to a location outside of the reservation.

Therefore, as part of its Application A.13-10-20, SCE requested an Interim Decision from the CPUC for authority to lease transfer capability rights in a portion of the Proposed Project’s upgraded and reconfigured transmission lines to Morongo Transmission. SCE stated that approving an Interim Decision early in the process was important because the ROW agreement is contingent on the CPUC approval of the proposed transaction. Without a ROW agreement, SCE would have to restart and develop a new project that bypasses the Morongo tribal-trust lands. However, in a Prehearing Conference on March 4, 2015, SCE stated that it was no longer requesting an Interim Decision. The terms of the proposed transaction set forth in the DCA and the ROW agreement are included in Appendix J of SCE’s Application A.13-10-020 (dated October 25, 2013) and Appendix 3 in this EIR/EIS.

A.2 Purpose and Need for the Proposed Project

SCE identified a number of objectives and submitted statements of the project purpose and need as part of its application to the CPUC for the Proposed Project (A.13-10-020). Section A.2.1 presents SCE’s project objectives and its purpose and need for the Proposed Project. Section A.2.2 presents the BLM purpose and need and Section A.2.3 describes the project objectives developed by the CPUC and BLM, after considering SCE’s information and data obtained by the EIR/EIS team.

A.2.1 Purposes of the Proposed Project

A.2.1.1 SCE’s Project Purpose and Need

The application for the Proposed Project includes SCE’s full statements of Purpose and Need in PEA Sections 1.1 and 1.2. SCE presents 10 concepts to supporting the purpose and 6 concepts to demonstrate the need for the Proposed Project. For informational purposes, these are presented in Table A-1, with the purpose and need concepts aligned in the same row, where appropriate.

Table A-1. SCE’s Purpose and Need

SCE’s 10 Project Purpose Concepts	SCE’s 6 Project Need Concepts
<ul style="list-style-type: none"> ▪ Integrate planned generation resources ▪ Facilitate progress toward achieving renewables portfolio standard goals by providing transmission upgrades to deliver renewable generation in the Blythe and Desert Center areas ▪ Support integration of small scale generation ▪ Support California’s greenhouse gas reduction program ▪ Support federal renewable energy goals ▪ Support goals of the California Energy Commission Integrated Energy Policy Report ▪ Support Desert Renewable Energy Conservation Plan 	<ul style="list-style-type: none"> ▪ The Proposed Project is needed to facilitate integration of renewable generation resource being developed in the Coachella Valley area ▪ The Proposed Project is needed to integrate and interconnect generation resources within the Blythe and Desert Center areas ▪ The Proposed Project facilitates progress toward California’s RPS goals
<ul style="list-style-type: none"> ▪ Comply with Large Generator Interconnection Agreements 	<ul style="list-style-type: none"> ▪ The Proposed Project is needed to comply with executed Large Generator Interconnection Agreements (LGIAs)
<ul style="list-style-type: none"> ▪ Support integration of generation with Power Purchase Agreements 	<ul style="list-style-type: none"> ▪ The Proposed Project is needed to support integration of generation with executed Power Purchase Agreements (PPAs)
<ul style="list-style-type: none"> ▪ Comply with reliability standards 	<ul style="list-style-type: none"> ▪ The Proposed Project is needed to comply with reliability standards

Source: SCE, 2013: PEA Sections 1.1 and 1.2.

A.2.1.2 SCE's Project Objectives

In SCE's Application (and in PEA Section 1.3), SCE identified 6 basic objectives for the Proposed Project:

1. Allow SCE to meet its obligation to integrate and fully deliver the output of new generation projects located in the Blythe and Desert Center areas that have requested to interconnect to the electrical transmission grid.
2. Consistent with prudent transmission planning, maximize the use of existing transmission line rights-of-way to the extent practicable.
3. Meet project need while minimizing environmental impacts.
4. Facilitate progress toward achieving California's RPS goals in a timely and cost-effective manner by SCE and other California utilities.
5. Comply with applicable Reliability Standards and Regional Business Practice developed by NERC, WECC, and the CAISO; and design and construct the project in conformance with SCE's approved engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects.
6. Construct facilities in a timely and cost-effective manner by minimizing service interruptions to the extent practicable.

A.2.1.3 Review of SCE's Purpose and Need

The existing WOD transmission system includes four primary 220 kV circuits with uneven line ratings and mismatching single- and double-circuit structures. SCE evaluated whether the existing electrical infrastructure can be modified to meet the project objectives. During preliminary planning for the currently Proposed Project, SCE determined that modifying the existing substation facilities (as was proposed in 2005) would not adequately resolve the constraints associated with the existing WOD transmission lines (SCE PEA Section 2.1 and 2.1.2). As a result, SCE proposes to remove a majority of the existing 220 kV structures and replace them with larger capacity 220 kV structures.

The Proposed Project would substantially increase the capacity of the corridor. The existing 220 kV transmission lines and structures between Devers, El Casco, San Bernardino, and Vista Substations, as operated in conjunction with the separately installed 2013 SCE West of Devers Interim Project, have a system transfer capacity of 1,600 MW. The capacity would increase to 4,800 MW with the Proposed Project; however, higher flows could normally be carried. Setting the proposed system transfer capacity at 4,800 MW includes a scheme to remove from service up to 1,400 MW of generation during certain emergency conditions (for example, if two of the four lines are temporarily out of service; SCE Response to CPUC Data Request ALT-11). The actual power flows that could be carried by each of the four proposed 220 kV circuits under normal operating conditions would range up to 1,292 MW (SCE Response to CPUC Data Request ALT-11). This results in a total project capacity for the corridor with all lines in service under normal conditions of 5,168 MW combined.

Increasing the system transfer capacity in the corridor is SCE's proposed solution to achieving its Project Objectives, and to integrate the growth in generation. Most of the renewable power projects that are new and proposed or planned to be located in the Blythe and Desert Center areas east of the Devers Substation request "full capacity deliverability status"⁴ transmission service from SCE and the CAISO.

⁴ The California ISO Tariff defines a generation project's **deliverability** as one of two discrete states: "Full Capacity Deliverability Status" or "Energy-Only Deliverability Status." Full Capacity Deliverability is defined as "The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid ... can deliver the Large Generating Facility's full output to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's Reliability Criteria and procedures and the CAISO On-Peak Deliverability Assessment."

To determine what transmission facilities are appropriate in light of these generator interconnection requests, the CAISO periodically conducts generator interconnection studies. The CAISO groups the generators into clusters to simplify the interconnection studies. Studies completed by CAISO in 2010 concluded with a plan, designated as a “Delivery Network Upgrade,” to achieve a rating under normal conditions of 3,000 Amperes per circuit for each of the four circuits in the WOD corridor (CAISO, 2010).⁵ The designation as a Delivery Network Upgrade makes the Proposed Project distinct from a “Reliability Network Upgrade,” which is a transmission improvement necessary for safe and reliable operation of the grid.⁶ At 3,000 Amperes per circuit, as identified by CAISO, the WOD corridor could carry power flows in excess of 1,200 MW per circuit, which achieves the anticipated rating of 4,800 MW total.

The existing electrical ratings of the individual circuits and power flow capacity that could be achieved by the Proposed Project are summarized in Table A-2.

Table A-2. Capacity of Individual 220 kV Circuits, Existing and Proposed

Circuit	Existing Line Rating (Amperes)	Proposed Project Normal Line Rating ¹ (Amperes)	Proposed Project Emergency Rating ² (Amperes)	Proposed Project Normal Capacity ¹ (MW)	Proposed Project Emergency Capacity ² (MW)
Devers–Vista No. 1	1,150	3,230	4,360	1,292	1,744
Devers–Vista No. 2	1,240	3,230	4,360	1,292	1,744
Devers–San Bernardino	796	3,230	4,360	1,292	1,744
Devers–El Casco & El Casco–San Bernardino	1,150	3,230	4,360	1,292	1,744
WOD Corridor: Four Circuits Total	4,336	12,920	17,440	5,168	6,976

1 - Under normal conditions and SCE standard conditions, with all lines in service. Using proposed 2B-1590: Each phase would consist of double-bundled (bundle of two conductors for each phase) 1,590 kcmil (one thousand circular mils) aluminum conductor steel reinforced (ACSR) conductor. (SCE Response to Data Request ALT-12 and ALT-19.)

2 - Under SCE emergency conditions. (SCE Response to Data Request ALT-19.)

The application indicates that the Proposed Project would allow SCE to comply with previously executed interconnection agreements and enable “full capacity deliverability status” for generators in the CAISO generation queue. However, some of the renewable power projects that request interconnection and enter the queue may not come to fruition.

⁵ The CAISO Tariff Appendix A defines **Delivery Network Upgrade** as: “Transmission facilities at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies to relieve Constraints on the California ISO Controlled Grid.”

⁶ The CAISO Tariff Appendix A defines **Reliability Network Upgrade** as: “The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Generating Facility(ies) safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for system operating limits, occurring under any system condition, which system operating limits cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems based on the characteristics of the Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Generating Facility’s interconnection may have on a path’s WECC rating.”

The Proposed Project would give the WOD corridor a large margin of capacity to handle power flow during all conditions and for future growth, including generation projects not yet in the CAISO queue. Independent power flow modeling was conducted by the EIR/EIS team to assess the loading in each of the corridor's circuits, during normal operations and during times when one or more circuits are out of service. The modeled outages are called contingencies, and the results of the modeling indicate the amount of loading during the worst single contingency. During the worst-case scenario of all foreseeable generation projects (the CAISO's Cluster 7, Phase I, 2019 base case) and the worst single contingency, the Proposed Project would be loaded to about 63 percent of its capability, leaving a margin of 37 percent. This information is used in the development of alternatives to the Proposed Project (see Section C, Alternatives and Appendix 5, Alternatives Screening Report).

A.2.1.4 Interconnecting Planned Generation Resources

The key objective of the Proposed Project is to increase the power transfer capability of the WOD transmission facilities to interconnect and fully deliver the electrical power from planned generation resources, primarily in eastern Riverside County. Growth in the number and size of power plants in the desert region contributes to the project need. Power generated in eastern Riverside County, as well as power imported to California from out-of-state and to SCE from Imperial County, flows into the Devers Substation and downstream to customers in the utility load centers in the Los Angeles basin. The Proposed Project would increase the system transfer capacity by approximately 3,200 MW, from current capacity of approximately 1,600 MW to the proposed 4,800 MW (SCE PEA Section 1.1.10 and 3.0).

The generation resources that have recently come online or that have interconnection agreements predating the Proposed Project include one 550 MW solar project (Desert Sunlight) and nearly 2,000 MW from natural gas fired power plants in the vicinity of the Devers Substation and in eastern Riverside County. These generation projects had or have development timelines that predate the approval of the DPV2 Project by CPUC in January 2007, and these also predate the Proposed Project. These generation resources that predate the Proposed Project amount to an output generating capacity of more than 2,500 MW.

As defined in Section A.2.1.4.1 below, SCE and the CAISO have identified a number of individual generation projects that are dependent on the additional transfer capacity that the Proposed Project would provide. These projects have been categorized into analysis categories for this EIR/EIS based on CEQA and NEPA criteria. The description of how each project is considered in this EIR/EIS is presented in Section A.3 below.

A.2.1.4.1 Individual Generation Projects

In 2010, the Proposed Project was identified by CAISO as a required Delivery Network Upgrade to accommodate and deliver 2,200 MW from five renewable energy generation projects. The five generation projects were at that time proposed to be in SCE's eastern desert area from the Devers Substation to the Colorado River Substation. The scope of the Delivery Network Upgrade in the WOD corridor was for each of the four primary 220 kV circuits to be rated in normal conditions at 3,000 Amperes (CAISO, 2010), which is a rating that could carry power flows of 1,200 MW per circuit for 4,800 MW total.

The five solar power plant projects in the 2010 CAISO study were known as the Transition Cluster for transmission planning this region. Since 2010, one has withdrawn its request and others have reduced their anticipated output. The result is that the 2,200 MW of planned generation from the Transition Cluster in 2010 has fallen to a combined total of 1,535 MW (CAISO, 2014). Table A-3 identifies these Transition Cluster projects and the status of each.

Table A-3. Planned Generation in SCE Transition Cluster (2010)

CAISO Queue Position	Location	Project Type	2010 Proposed Size (MW)	2014 Planned or Online Size (MW)
193	NextEra Desert Center Blythe, LLC (Genesis McCoy)	solar thermal and solar PV	500	500
294	NextEra Blythe Solar Energy Center, LLC	solar PV	1,000	485
365	Palen SEGS II, LLC (Palen) subsidiary of BrightSource Energy	solar thermal	500	500
421	Blythe–Eagle Mountain 161 kV line	solar PV	50	50
431	Colorado River 220 kV	solar thermal	150	Withdrawn
Total Transition Cluster Generation			2,200	1,535

Source: CAISO, 2010; CAISO, 2015.

At the time of SCE filing the October 2013 Application for the Proposed Project, SCE identified new and recent power plant projects having a total generating capacity of 2,479.5 MW as having either an executed Large Generator Interconnection Agreement (LGIA) or an agreement under negotiation (SCE, 2013: PEA Section 1.1.2). Additionally, 400 MW of generation has applied for an interconnection agreement since October 2013, and an incremental 850 MW of power import capability could be achieved through ongoing upgrades of the transmission path from IID into Devers, known as the Path 42 Upgrades (SCE, 2014: SCE Response to Data Request ALT-17(d)). SCE also notes that the CAISO assumed that the incremental capacity provided by the Proposed Project would be available to accommodate additional power flow into California over the planned Delaney-Colorado River 500 kV line approved by CAISO in 2014 (SCE, 2014: SCE Response to Data Request ALT-10).

These various generation and transmission projects each contribute to the growth in power flows into the Devers Substation that SCE hopes to accommodate by increasing the capacity of the corridor by 3,200 MW with the Proposed Project. Tables A-4 through A-6 itemize these projects, separated by their progress through stages of development.

A.2.2 BLM’s Purpose and Need

In accordance with the Federal Land Policy and Management Act (FLPMA) (Section 103(c), 43 United States Code [U.S.C.] §1702(c)), public lands are to be managed for multiple uses that take into account the needs of future generations for renewable and non-renewable resources. The Secretary of the Interior is authorized to grant ROWs on public lands for systems for generation, transmission, and distribution of electric energy (Section 501(a)(4), 43 U.S.C. §1761(a)(4)). Taking into account BLM's multiple use mandate, the purpose and need for the action is BLM to respond to FLPMA ROW application submitted by SCE to construct, operate and maintain the proposed West of Devers Upgrade Project over public lands administered by BLM in compliance with FLPMA, BLM ROW regulations, and other applicable Federal laws and policies.

SCE has requested to upgrade existing transmission facilities crossing BLM-managed public lands totaling about 35 acres. Based on this EIS and other information submitted by SCE, the BLM will decide whether to approve, approve with modifications, or deny issuance of a ROW grant to the Applicant for the project. The BLM may include any terms, conditions, and stipulations it determines to be in the public interest, and may include modifying the proposed use or changing the route or location of the proposed facilities (43 CFR 2805.10(a)(1)).

Federal Renewable Energy Mandates and Policies

BLM is committed to supporting the development necessary and appropriate to meet State and federal renewable energy goals, as guided by the following management objectives:

1. **Executive Order 13212**, dated May 18, 2001, which mandates that agencies act expediently and in a manner consistent with applicable laws to increase the "production and transmission of energy in a safe and environmentally sound manner."
2. **Department of the Interior Secretarial Order 3285AI**, dated March 11, 2009 and amended on February 22, 2010, which "establishes the development of renewable energy as a priority for the Department of the Interior."
3. **BLM Instruction Memorandum (IM) 2011-061**, dated February 7, 2011, which prioritizes the development of solar facilities on, inter alia, "[l]ands specifically identified for solar or wind energy development in BLM land use plans; [p]reviously disturbed sites or areas adjacent to previously disturbed or developed sites; [l]ocations that minimize construction of new roads and/or transmission lines; [and l]ands adjacent to designated transmission corridors ..."
4. **President Obama's Climate Action Plan**, dated June 2013, directed the Interior Department to approve at least 20,000 megawatts of renewable energy capacity on the public lands by 2020. In 2012 the President set a goal to issue permits for 10,000 megawatts of renewables on public lands by the end of the year. The Department of the Interior achieved this goal ahead of schedule and the President has directed it to permit an additional 10,000 megawatts, for a total of 20,000 megawatts from public lands, by 2020.
5. **Desert Renewable Energy Conservation Plan (DRECP)**. The Final DRECP Land Use Plan Amendment (LUPA) and EIS was released on November 10, 2015, with the Record of Decision anticipated to be released in late spring, 2016. The preferred alternative defined in the LUPA and Final EIS designates 148,000 acres of Development Focus Areas (DFAs) in Eastern Riverside County with high-quality solar and wind energy resources. It also defines 109,000 acres of DFAs in Imperial County and that allow for development of high quality solar, wind and geothermal energy resources. These DFAs have access to transmission and allow for impacts to be managed and mitigated. Applications would benefit from a streamlined permitting process with predictable survey requirements and simplified mitigation measures, and Interior is considering additional financial incentives through an ongoing rulemaking process. Final approval of the DRECP is anticipated to increase development interest in these DFAs that would increase transmission capacity needs west of the Devers Substation.

BLM Energy Projects Related to the West of Devers Upgrade Project

The need for the WOD Upgrade Project is driven by a number of renewable energy and transmission projects that are in operation, under construction, or under consideration by BLM and other agencies. These projects are presented in Table A-4. This table focuses only on projects in BLM review, and it identifies the positions, where known, of each project in the transmission interconnection queue maintained by the California Independent System Operator (CAISO). The first project listed in the table (Desert Sunlight) became operational in 2013 and 2014, and therefore does not rely on the proposed WOD Upgrade Project. To deliver renewable energy to California customers in a manner consistent with State and federal goals, and based on the study by CAISO in 2010 of generation projects in the "Transition Cluster" studies in 2010, the CAISO recommended upgrading the WOD corridor in a manner consistent with the proposed WOD Upgrade Project. Table A-4 shows that BLM has either recently completed or recently

begun the review process for 4,696 MW of new solar power that would be likely to benefit from the proposed WOD Upgrade Project.

In addition to renewable energy generation projects, Table A-4 lists two major transmission projects (one completed and one in planning) that could increase the use of the WOD corridor by importing additional power into the SCE territory from Arizona and the Imperial Valley:

- **Ten West Link Transmission Project** (Delaney-Colorado River 500 kV): This proposed transmission line would add a second 500 kV circuit between the Colorado River Substation (just west of Blythe) and the western Phoenix area. It would increase the existing system’s capability to transmit both renewable and conventional (gas-fired) energy between Arizona and eastern Riverside County in California. Upon approving this project in 2014, the CAISO determined that it could provide an incremental import capacity benefit of 200 to 300 MW from Arizona. The CAISO expects California to accrue the associated economic benefits after the Ten West Link is in service, but these benefits depend on the proposed WOD Upgrade Project also being in service.
- **Path 42 Upgrades** (Imperial Irrigation District and Southern California Edison; Imperial County to Riverside County): This project is nearly constructed and is expected to be fully online in June, 2016; it adds approximately 900 MW of transfer capacity from the Imperial Valley to the SCE system, increasing the system’s ability to export renewable generation from the Imperial Valley.

Table A-4. Renewable Energy Projects Related to WOD Upgrade

Project Name (Owner or Applicant)	Project MW	Status	Location; Description
Solar Power Project Previously Approved			
Desert Sunlight Solar Project (NextEra)	550	<ul style="list-style-type: none"> ▪ Operational prior to WOD Upgrade application 	<ul style="list-style-type: none"> ▪ BLM ROW granted in 2011 (CACA 48649) ▪ 9 miles northwest of Red Bluff Substation ▪ CAISO Queue 146 and 147, predating the proposed WOD Upgrade
Solar Power Projects Recently Approved or in Process			
Genesis Solar (NextEra)	250	<ul style="list-style-type: none"> ▪ Operational 	<ul style="list-style-type: none"> ▪ BLM ROW granted in 2010 (CACA 48880) ▪ 11 miles northwest of Colorado River Substation (Ford Dry Lake) ▪ CAISO Queue 193 (with McCoy) and Transition Cluster
Blythe Solar (NextEra)	485	<ul style="list-style-type: none"> ▪ Under construction 	<ul style="list-style-type: none"> ▪ BLM ROW granted in 2014 (CACA 48811) ▪ 5 miles northeast of Colorado River Substation ▪ CAISO Queue 294 and Transition Cluster
McCoy Solar (NextEra)	250 (#1) 500 (#2)	<ul style="list-style-type: none"> ▪ Under construction 	<ul style="list-style-type: none"> ▪ BLM issued 2 grants of ROW in 2014 and 2015 for up to 750 MW (CACA 48728) ▪ 6 miles northeast of Colorado River Substation ▪ CAISO Queue 193 (for #1) and Transition Cluster
Maverick Solar (EDF) (previously Palen SEGS)	500	<ul style="list-style-type: none"> ▪ POD review 	<ul style="list-style-type: none"> ▪ Plan of Development under review in 2015 (CACA 48810) ▪ CAISO Queue 365 and Transition Cluster
Desert Harvest Solar (EDF)	150	<ul style="list-style-type: none"> ▪ ROD & ROW issued ▪ No construction yet 	<ul style="list-style-type: none"> ▪ BLM ROW grant 2013 (CACA 49491) ▪ 7 miles northwest of Red Bluff Substation (Desert Center) ▪ CAISO Queue 643AE
Desert Quartzite Solar (First Solar)	300	<ul style="list-style-type: none"> ▪ EIS in progress 	<ul style="list-style-type: none"> ▪ Plan of Development under review in 2015 (CACA 49397) ▪ 5 miles east of Colorado River Substation ▪ CAISO Queue status unknown

Table A-4. Renewable Energy Projects Related to WOD Upgrade

Project Name (Owner or Applicant)	Project MW	Status	Location; Description
Blythe Mesa Solar (RRG)	485	<ul style="list-style-type: none"> ▪ ROD issued for gen-tie ▪ No ROW grant yet 	<ul style="list-style-type: none"> ▪ BLM decision in 2015 (CACA 053213) ▪ 4 miles east of Colorado River Substation ▪ On private land with BLM transmission component to the Colorado River Substation ▪ CAISO Queue status unknown
Crimson Solar (Recurrent)	450	<ul style="list-style-type: none"> ▪ POD review 	<ul style="list-style-type: none"> ▪ Plan of Development under review in 2015 ▪ Adjacent to (south of) Colorado River Substation ▪ CAISO Queue status unknown
Solar Blythe II at Blythe Airport (NRG Energy)	20	<ul style="list-style-type: none"> ▪ Approved by Riverside County 	<ul style="list-style-type: none"> ▪ Originally approved as a 100 MW project in 2010. ▪ Amended expired lease for 20 MW, which was approved in June 2015.
First Solar Electric Blythe 1	21	<ul style="list-style-type: none"> ▪ Operational 	<ul style="list-style-type: none"> ▪ Operational
Palo Verde Mesa	485	<ul style="list-style-type: none"> ▪ Under environmental review 	<ul style="list-style-type: none"> ▪ NOP issued in August 9, 2012. ▪ Adjacent to Blythe Mesa to the north
Solar Reserve (Mule Mountain III)	250	<ul style="list-style-type: none"> ▪ Pre-NOI 	<ul style="list-style-type: none"> ▪ BLM First In-line Solar Application (CACA 50390)
	4,696	Total MW	
Pumped Storage			
Eagle Mountain Pumped Storage Facility	1,300	<ul style="list-style-type: none"> ▪ FERC License issued June 2014 ▪ Final EIR released July 2013. SWRCB approved project in July 2013 	<ul style="list-style-type: none"> ▪ Pumped storage hydroelectric project with project reservoirs formed by filling existing mining pits at the old Kaiser Mine near Desert Center.
Transmission Projects			
	Voltage	Status	Location; Description
Ten West Link (Abengoa)	500 kV	<ul style="list-style-type: none"> ▪ DEIS in progress (BLM Arizona) 	<ul style="list-style-type: none"> ▪ Transmission line between the Delaney Wash in the Palo Verde Hub of Arizona and SCE's Colorado River Substation
Path 42 Upgrades (IID/SCE)	230 kV	<ul style="list-style-type: none"> ▪ Operational 	<ul style="list-style-type: none"> ▪ Transmission upgrades between the IID Coachella Valley area and SCE's Devers Substation via the Mirage Substation

Generation Projects Currently in CAISO Queue

The need for the proposed WOD Upgrade Project is reflected in a review of the generation queue maintained by the California Independent System Operator (CAISO). Generators that are seeking to connect to SCE's system apply for positions in the CAISO generation queue. The CAISO queue lists the capacity of each proposed project by generator type, including conventional (natural gas-fired) generation and storage project capacity (also included in the conventional category). Because the contents of the queue are updated monthly, it provides an up-to-date indication of developer interest, but it has also been documented that a significant percentage of renewable power projects that have been in the queue have not come to fruition. As a result, the queue defines the upper limit on likely projects.

SCE's initial application for the WOD Upgrade Project was based on the projects listed in Table A-5, which, at that time, indicated a need for an additional 2,200 MW of deliverability.

Table A-5. 2010 Projects in CAISO Queue and Transition Cluster Studies

CAISO Queue #	2010 Planned Technology	Point of Interconnection	Project MW	Comments and PPA Status
193	Solar PV & Solar Thermal	Colorado River 220 kV	500	LGIA – Executed; Already in-service PPA Status: Executed
294	Solar PV	Colorado River 220 kV	1,000	Project size was reduced to 485 MW; LGIA – Executed; In-service date: 2016 to 2020 PPA Status: Executed for 360 MW
365	Solar Thermal	Red Bluff 220kV	500	LGIA – Executed; In-service date: 2020 to 2021 PPA Status: Unknown
421	Solar PV	Blythe-Eagle Mountain 161 kV	49.5	LGIA - Under Negotiation; Proposed In-service date: 12/2020 PPA Status: Unknown
431	Solar Thermal	Colorado River 220kV	150	Project withdrawn
			2,200	Total MW in 2010

Source: Comments and PPA Status provided by SCE.
CAISO Report Date: 02/26/2016; available at: <http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx>.
LGIA: Large Generator Interconnection Agreement. PPA: Power Purchase Agreement.

Since SCE’s initial application for the WOD Upgrade Project, the number of generators seeking to interconnect to SCE’s system has grown. As of February 2016, Riverside County has more generators in the queue than any other California county. In addition to the projects shown in Table A-5, newer positions in the queue are presently held for generators planned in eastern Riverside County, representing an additional 3,147 MW.

Table A-6 shows 11 projects totaling 3,147 MW that entered the CAISO queue during or after 2010. These projects include those up to and including Cluster 8, and the generators include those requesting Full Capacity Deliverability Status (FCDS), which are likely to rely on the proposed WOD Upgrade Project.

Table A-6. 2016 Projects that Entered the CAISO Queue in 2010 or Later

CAISO Queue #	Technology	Point of Interconnection	Project MW	Comments and PPA Status
576	Solar PV	Colorado River 220 kV Bus	224	LGIA – Executed, In-service date: 09/2018 PPA Status: Under Negotiation
643AE	Solar PV	Red Bluff 220kV Bus	150	Desert Harvest (EDF) LGIA – Executed, In-service date: 08/2019 PPA Status: Under Negotiation
970	Solar PV	Colorado River 220 kV Bus	150	LGIA – Under Negotiation, Propose In-service date: 09/2018 PPA Status: Unknown
1070	Solar PV	Red Bluff 220 kV Bus	250	Study Phase-QC7 Phase II, Propose In-service date: 12/2018 PPA Status: Unknown
1071	Solar PV	Colorado River 220 kV Bus	150	Study Phase-QC7 Phase II, Propose In-service date: 5/2019 PPA Status: Unknown
1192	Solar PV	Colorado River 220 kV Bus	463	Study Phase-QC8 Phase I, Propose In-service date: 12/2020 PPA Status: Unknown

Table A-6. 2016 Projects that Entered the CAISO Queue in 2010 or Later

CAISO Queue #	Technology	Point of Interconnection	Project MW	Comments and PPA Status
1194	Natural Gas Combustion Turbine	Colorado River 220 kV Bus	600	Study Phase-QC8 Phase I, Propose In-service date: 6/2020 PPA Status: Unknown
1196	Solar PV	Colorado River 220 kV Bus	410	Study Phase-QC8 Phase I, Propose In-service date: 4/2022 PPA Status: Unknown
1197	Battery	Red Bluff 220kV Bus	400	Study Phase-QC8 Phase I, Propose In-service date: 9/2018 PPA Status: Unknown
1198	Solar PV	Colorado River 220 kV Bus	150	Study Phase-QC8 Phase I, Propose In-service date: 12/2020 PPA Status: Unknown
1200	Solar PV	Red Bluff 220kV Bus	200	Study Phase-QC8 Phase I, Propose In-service date: 12/2018 PPA Status: Unknown
			3,147	Total MW

Source: Comments and PPA Status provided by SCE.

CAISO Report Date: 02/26/2016; available at: <http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx>.

QC7: Study window for Queue Cluster 7; QC8: Queue Cluster 8.

Within eastern Riverside County, most of the 4,696 MW of solar energy projects that are listed in Table A-4 are also included in the queue. The queue also includes at least 1,000 MW of planned conventional (natural gas-fired) projects and storage projects not shown in Table A-4. Some projects in Table A-4 that are under BLM review would not directly require a point of interconnection on the CAISO system, and are therefore not included in the queue.

In addition to the 2,200 MW level of development originally anticipated and shown in Table A-5, Table A-6 shows that at least another 3,100 MW of projects are planned for eastern Riverside County that entered the queue relatively recently. These tables illustrate a wide range of remaining and planned generation that would be located east of the Devers Substation and would therefore be likely to benefit from the proposed WOD Upgrade Project.

A.2.3 CPUC and BLM Project Objectives

Project objectives under CEQA are defined in order to allow proper consideration of alternatives to the Proposed Project. The State CEQA Guidelines (Section 15126.6(a)) state that “An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.”

Having taken into consideration the objectives and purpose and need set forth by SCE (Sections A.2.1.1 and A.2.1.2), the CPUC and BLM identified 3 basic project objectives. These objectives are used by the CPUC and BLM to evaluate alternatives and to define a range of reasonable alternatives to the Proposed Project. The evaluation of alternatives in this EIS provides information on whether each alternative could feasibly accomplish most or all of these basic objectives. The 3 basic project objectives are presented and explained below.

Basic Project Objective 1: To upgrade the WOD 220 kV transmission lines between Devers, El Casco, Vista, and San Bernardino Substations to increase system deliverability by at least 2,200 MW.

The first Basic Project Objective reflects the aim to provide increased deliverability of electricity, defined in terms of MW, for existing and planned generating facilities that are located far from the utility load centers in the Los Angeles basin. Before the Proposed Project was planned, the transmission transfer capability of the WOD 220 kV corridor was limited to approximately 550 MW. Since then, several generators with plans to be online before the Proposed Project's estimated completion date in 2020 requested interconnection to the system. In order to accommodate and deliver the initial group of 5 solar power generation projects that was planned, totaling 2,200 MW (CAISO, 2010), the minimum total capability that would need to be achieved by the Proposed Project or an alternative is 2,750 MW. Accordingly, the first Basic Project Objective is to increase deliverability by at least 2,200 MW. The initial 5 projects are described in Section A.2.1.4.1 above, Table A-3, and in 2010 they were the following:

- NextEra Desert Center Blythe, LLC (Genesis McCoy): 500 MW
- NextEra Blythe Solar Energy Center, LLC: 1,000 MW
- Palen SEGS II, LLC (Palen) subsidiary of BrightSource Energy: 500 MW
- Project interconnecting at Blythe–Eagle Mountain 161 kV line: 50 MW
- Project interconnecting at Colorado River 220 kV: 150 MW

The EIS team completed independent power flow modeling to evaluate the capacity of the current transmission system, the Proposed Project, and several sensitivities. The report of these studies is presented as Attachment 2 to EIS Appendix 5 (Alternatives Screening Report). The CAISO's 2024 Reliability Base Case, from the CAISO's 2013/2014 transmission planning process (one of the base cases used in the alternative analysis) represents the view from the CAISO's and SCE's perspective (a collaborative effort) of the level of generation deemed viable (based on a number of criteria) and to be in place and operational in 2024. In developing the 2024 Reliability Base Case, the CAISO included only that generation that was under construction or had received regulatory approval at the time. The generation level from all renewable and conventional resources within the Eastern Bulk system for the region under analysis is:

- Total Generation On-line: 3,754 MW
- Total Generation Capacity: 6,901 MW

The power flow modeling for the WOD Upgrade Project, and potential alternatives that would need to meet this objective, uses the 2024 Reliability Base Case.

Basic Project Objective 2: to support achievement of State and federal renewable energy goals.

The second Basic Project Objective is directly related to the first, because the projects that plan to rely on the Proposed Project for delivering electricity to the Los Angeles basin are primarily solar generation projects. Therefore, an increase in the capacity of the WOD transmission lines would directly improve the ability for numerous renewable generation projects to interconnect. Aside from the resources imported via transmission lines from outside of the SCE territory, all of the interconnecting projects are solar powered, as described in SCE's Application and PEA Sections 1.1 and 1.2. See also Section A.2.1.4.1 (above).

California's renewable energy goals are defined on the CPUC's website (CPUC, 2015):

Established in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107 and expanded in 2011 under Senate Bill 2, California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program

requires investor-owned utilities (IOUs), electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33% of total procurement by 2020.

The CPUC states that California's three large utilities collectively served 22.7% of their 2013 retail electricity sales with renewable power. Table A-7 presents the current RPS compliance status, as stated on the CPUC RPS website (<http://www.cpuc.ca.gov/PUC/energy/Renewables/>). The table illustrates that while SDG&E has exceeded the contractual requirements for reaching 33% by 2020, SCE and PG&E remain short of this goal.

The federal government also has prioritized the development of renewable energy, but has not set specific development targets for the country as a whole. As stated in the federal Purpose and Need discussion for the Desert Renewable Energy Conservation Plan Draft EIR/EIS (CEC and BLM, 2014):

Table A-7. California's RPS Compliance Status

Utility	Actual RPS Procurement Percentages for 2013	Percentage of RPS Procurement Currently Under Contract for 2020
PG&E	23.8 %	31.3%
SCE	21.6%	23.5%
SDG&E	23.6%	38.8%

Source: CPUC, 2015

- The Energy Policy Act's goal of at least 10,000 MW of renewable energy generation on public land as well as the more recent goal of an additional 10,000 MW on public land by 2020 (White House, 2013a).
- The Presidential Memorandum, issued May 17, 2013, directs federal agencies to modernize federal infrastructure review and permitting regulations, policies, and procedures. Among other best management practices, this memorandum directs federal agencies to integrate project reviews among agencies with permitting responsibilities; ensure early coordination with other federal agencies, as well as with state, local, and tribal governments; strategically engage with, and conduct outreach to, stakeholders; employ project-planning processes and individual project designs that consider local and regional ecological planning goals; utilize landscape-level mitigation practices; promote the sharing of scientific and environmental data in open-data formats to minimize redundancy, facilitate informed project planning, and identify data gaps early in the review and permitting process; and apply best environmental and cultural practices as set forth in existing statutes and policies (White House, 2013b).
- The Department of the Interior's (DOI's) established national policy goals (Secretarial Order [SO] 3285 and SO 3285A1; DOI, 2009) to identify and prioritize specific locations best suited for large-scale production of solar energy on public lands; encourage the production, development, and delivery of renewable energy as one of DOI's highest priorities; and work collaboratively with others to encourage the timely and responsible development of renewable energy and associated transmission while protecting the nation's water, wildlife, and other natural resources.

Basic Project Objective 3: to maximize the availability of remaining space in the corridor to the extent practicable, so future use of the corridor for additional transmission line upgrades is not precluded.

This objective reflects the aim to be prudent in the use of land within the existing transmission corridor and to allow adequate space within the ROW for future transmission expansion, if needed by SCE in the future. While SCE states that it currently has no specific plans for transmission expansion in the WOD corridor, there are other regional studies that point to the potential for future development. For the purposes of measuring consistency with this objective, 175 feet is used as an acceptable minimum ROW width for a 500 kV double-circuit transmission line. (For additional discussion of future transmission potential in the corridor, see EIS Section E, Cumulative Scenario and Impacts.)

A.3 Definition of Connected Actions and Related Projects

Section A.2.1.4.1 describes a number of projects that are driving the need for SCE to construct the Proposed Project. Table A-8 shows how the projects listed in Tables A-3 through A-6 are considered in this EIS. Further detail on the Connected Actions appears in EIS Section B and the impacts of the various projects are presented in EIS Sections D, E, and F.

Table A-8. Project Analysis Determinations

Projects Considered to be Connected Actions	Projects Considered to be Cumulative	Projects Considered to Fill Remaining Growth-Inducing Capacity
Analyzed in Section D, Environmental Analysis	Analyzed in Section E, Cumulative Scenario and Impacts	Analyzed in Section F Other CEQA and NEPA Requirements
<ul style="list-style-type: none"> ▪ Palen Solar Power Project (500 MW solar thermal, CAISO Queue 365) ▪ EDF Desert Harvest (150 MW solar PV, CAISO Queue 643AE) ▪ 50 MW Solar PV Project Connecting at Red Bluff Substation (CAISO Queue 421) ▪ 250 MW Solar Star Blythe Mesa Solar PV Project Connecting at Red Bluff Substation 230 kV (CAISO Queue 1070) ▪ 224 MW Solar PV Project Connecting at Colorado River Substation 230 kV (CAISO Queue 576) ▪ 150 MW Solar PV Project Connecting at Colorado River Substation 230 kV (CAISO Queue 970) ▪ 150 MW Solar PV Project Connecting at Colorado River Substation 230 kV (CAISO Queue 1071) 	<ul style="list-style-type: none"> ▪ Future 500 kV Transmission Line in WOD Corridor ▪ Blythe Energy Project, Phase II (570 MW gas-fired combined cycle plant) ▪ NextEra Genesis Project and NextEra McCoy Project (250 MW solar trough; 250 MW solar PV) ▪ NextEra Blythe Project (485 MW solar PV) ▪ IID Path 42 Upgrades (230 kV transmission line) ▪ CAISO Queue 798 (221 MW solar PV connecting at Colorado River Substation; energy only) ▪ Delaney-Colorado River 500 kV Transmission Line 	<ul style="list-style-type: none"> ▪ Blythe Mesa Solar Project (485 MW solar PV near Blythe) ▪ Palo Verde Mesa Solar Project (486 MW solar PV project near Blythe) ▪ Desert Quartzite Project (600 MW solar PV project near Blythe)
1,474 MW generation total	1,776 MW generation total Plus additional power flow across Path 42 Upgrades and Delaney-Colorado River 500 kV	1,571 MW generation total

A.4 Agency Use of This Document

The proposed route crosses federal, State, private, and tribal lands. SCE submitted an application and PEA to the CPUC so that the CPUC may issue a CPCN for the project and issue and certify an EIR for the California portion of the project pursuant to CEQA. SCE has also submitted an application to the BLM for an Amended ROW Grant and, if approved, the BLM would issue a Notice to Proceed, allowing construction to be administered by the BLM. Finally, BIA must issue a ROW Grant for the portion of the Proposed Project that would cross the Morongo tribal land.

A.4.1 BLM Process

The BLM is the federal lead agency for the preparation of this EIS in compliance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulation for implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508), and the BLM NEPA guidance handbook (H-1790-1). NEPA mandates that

federal agencies consider the environmental consequences of a wide variety of proposed actions. Specifically, NEPA requires federal agencies to prepare an EIS for “proposals for legislation and other major federal actions significantly affecting the quality of the human environment.” When the federal agency determines that a proposed action may “significantly affect the quality of human environment,” production of an EIS is required (42 U.S.C. 4332 (2)(c)).

The EIS preparation process consists of a series of procedural steps to ensure an adequate and open analysis of environmental issues. The BLM Handbook (Chapters IV.2 and IV.3) specifically notes that when analyzing impacts, effects on future generations and on long-term productivity of resources and the irreversible and irretrievable commitment of resources should be considered as well as direct physical impacts to existing populations and resources. Impacts of all alternatives must be compared because BLM must select a preferred alternative. The process provides and encourages opportunities for interagency coordination and public involvement.

The Notice of Intent (NOI) describing the Proposed Project was published in the Federal Register on July 1, 2014 (Volume 79, Number 126, pages 37345-37346). The NOI announced the beginning of the scoping process, and sought public input on environmental issues and planning criteria. The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the planning process. Preliminary issues for the Draft EIR/EIS have been identified by BLM personnel; Federal, State, and local agencies; and other stakeholders. The issues include: air quality and greenhouse gas emissions, biological resources including special status species, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, recreation, traffic, visual resources, cumulative effects, and areas with high potential for renewable energy development, and identification of opportunities to apply mitigation hierarchy strategies for on-site, regional, and compensatory mitigation.

The BLM will use the NEPA public participation requirements to assist the agency in satisfying the public involvement requirements under Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C.470(f)) pursuant to 36 CFR 800.2(d)(3). The information about historic and cultural resources within the area potentially affected by the proposed action will assist the BLM in identifying and evaluating impacts to such resources in the context of both NEPA and Section 106 of the NHPA.

The BLM will consult with Indian tribes on a government-to-government basis in accordance with Executive Order 13175 and other policies. Tribal concerns, including impacts on Indian trust assets and potential impacts to cultural resources, will be given due consideration. Federal, State, and local agencies, along with tribes and other stakeholders that may be interested in or affected by the proposed action were invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate in the development of the environmental analysis as a cooperating agency.

Once approved internally, the Draft EIR/EIS was printed, filed with the U.S. EPA, and issued for public review and comment. Chapter VIII of the BLM Handbook presents guidance on all of the administrative procedures for completing and circulating a BLM EIS. The public review period must be at least 45 days from the date the Draft EIR/EIS is transmitted to the U.S. EPA. Depending on the comments received and any additional analysis, the BLM is required to either select or revise the preferred alternative, if necessary, in this Final EIS. BLM has issued a press release announcing this Final EIS, which is available to the public for 30 days.

After the Final EIS is prepared, the BLM must circulate the Final EIS for at least 30 days prior to making a decision on the proposed action. Once the Final EIS is finalized, the Final EIS must be filed with the U.S. EPA’s Office of Federal Activities for notification in the Federal Register. The 30-day time period for public

review of a Final EIS is measured from the date of the publication in the Federal Register. The BLM may adopt an EIS only after it determines that the EIS meets the standards for EIS adequacy under NEPA. After the EIS has been adopted, the BLM should make a decision on the proposed action, which may not be made until 30 days after EPA has published the Notice of Availability that the Final EIS has been filed.

After preparing and adopting the EIS, and after making a decision on the proposed action, the BLM will prepare a Record of Decision (ROD) explaining why it has taken a particular course of action. The ROD cannot be issued until protests are resolved. The decision regarding the ROW grant is appealable to the Interior Board of Land Appeals upon issuance of a ROD. The BLM expects to issue a ROD in 2016. No action concerning a proposal may be taken until the ROD has been issued.

A.4.2 CPUC Process

Pursuant to Article XII of the Constitution of the State of California, the CPUC is charged with the regulation of investor-owned public utilities, including SCE. The CPUC is the lead agency for CEQA review of this project. The CPUC Energy Division has directed the preparation of an EIR. The CPUC's separate Final EIR under CEQA will be used by the Commission, in conjunction with other information developed in the Commission's formal record, to act on SCE's application for a CPCN for construction and operation of the Proposed Project. The CPUC has exclusive authority to approve or deny SCE's application or an alternative; however, various permits from other agencies may also need to be obtained by SCE to build the Proposed Project. If the CPUC issues a CPCN, it would provide overall project approval and certify compliance of the project with CEQA.

If the CPUC approves a project with significant and unavoidable impacts, it must state why in a "Statement of Overriding Considerations," which would be included in the Commission's decision on the application. The Commission's decision, and the Evidentiary Hearings, will cover issues of project need, project cost, and other considerations.

On August 8, 2014, CPUC assigned Administrative Law Judge (ALJ) Hallie Yacknin to oversee the hearings on the Proposed Project, and on January 9, 2015, Commissioner Liane Randolph became the Assigned Commissioner for the CPCN application. The Notice of Preparation (NOP) describing the Proposed Project was published on May 7, 2014. The ALJ's Proposed Decision, and the Evidentiary Hearings, will cover issues of project need, project cost, and other considerations. The CPUC expects a final decision from the Commission in 2016.

A.4.3 Other Agencies

Several other State and federal agencies will rely on information in this EIS to inform them in their decision over issuance of specific permits related to project construction or operation. In addition to BLM, BIA also has reviewing and permitting authority of the Proposed Project for the portion of the route on Morongo tribal land. The BIA has accepted BLM's offer to be a Cooperating Agency in this EIS under NEPA. SCE would apply to BIA for the grant of ROW across the new 3-mile alignment across the Morongo tribal land.

In addition to the CPUC, BLM and BIA, State agencies such as the Department of Transportation, Department of Fish and Wildlife, Regional Water Quality Control Board, and Office of Historic Preservation would be involved in reviewing and/or approving the project. On the federal level, agencies with potential reviewing and/or permitting authority include the U.S. Fish and Wildlife Service, Advisory Council on Historic Preservation, and the Occupational Safety and Health Administration.

No local discretionary (e.g., use) permits are required, since the CPUC has preemptive jurisdiction over the construction, maintenance, and operation of SCE facilities in California. CPUC General Order 131-D, Section XIV.B states that "local jurisdictions acting pursuant to local authority are preempted from regulating

electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission’s jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters. In instances where the public utilities and local agencies are unable to resolve their differences, the Commission shall set a hearing no later than 30 days after the utility or local agency has notified the Commission of the inability to reach agreement on land use matters.” The CPUC’s authority does not preempt special districts, such as the South Coast Air Quality Management District, or other State agencies or the federal government.

A.4.4 Permits Required for the Proposed Project

Table A-9 summarizes the permits or approvals from other federal, tribal, State or regional, and local agencies that may be needed for the project.

Table A-9. Permits that May Be Required for the West of Devers Upgrade Project

Agency	Jurisdiction	Requirements
Federal Agencies		
U.S. Bureau of Land Management (BLM)	Construction on or in lands administered by the BLM	<ul style="list-style-type: none"> ▪ Amendment to Right-of-Way Grant / Record of Decision / Notice to Proceed for transmission line ▪ Temporary Use Permit
U.S. Bureau of Indian Affairs (BIA)	Tribal lands	<ul style="list-style-type: none"> ▪ Right-of-Way Grant/Easement
U.S. Fish and Wildlife Service (USFWS)	Protection of federal listed, threatened and endangered species	<ul style="list-style-type: none"> ▪ Consultation for Section 7 of the Endangered Species Act ▪ Habitat Conservation Plans – Riverside County
U.S. Army Corps of Engineers (USACE), Los Angeles District	Construction or operation of facilities which may result in any discharge into U.S. navigable waters	<ul style="list-style-type: none"> ▪ Section 404 Permit – discharge of fill material into jurisdictional waters
Federal Aviation Administration (FAA)	Air safety near San Bernardino International Airport and Banning Municipal Airport	<ul style="list-style-type: none"> ▪ Form 7460–1, Notice of Proposed Construction or Alteration; Permit and Notice to Airmen ▪ Form 7460-2 Notice of Actual Construction or Alteration
Federal Communications Commission (FCC)	Licenses/permits related to FCC frequencies and paths	<ul style="list-style-type: none"> ▪ Telecommunications Permit (as required)
Federal Energy Regulatory Commission (FERC)	Ratemaking for transmission facilities	<ul style="list-style-type: none"> ▪ Ratemaking
Tribal Land		
Morongo Band of Mission Indians	Reservation lands	<ul style="list-style-type: none"> ▪ Consent to Right-of-Way Grant/Easement
U.S. Environmental Protection Agency (EPA)	Tribal Lands	<ul style="list-style-type: none"> ▪ Clean Water Act Section 402, General Permit for Storm Water Discharges Associated with Construction Activities on Tribal Land
State or Regional Agencies		
California Public Utilities Commission (CPUC)	Transmission, substation, generation projects 50 kV and above	<ul style="list-style-type: none"> ▪ Certificate of Public Convenience and Necessity
California Department of Fish and Wildlife (CDFW)	Protection of fish, wildlife, plant resources and habitats	<ul style="list-style-type: none"> ▪ Streambed Alteration Agreement, Section 1602 Permit (if required)

Table A-9. Permits that May Be Required for the West of Devers Upgrade Project

Agency	Jurisdiction	Requirements
Regional Water Quality Control Board (RWQCB) – Colorado River Office (Region 7) and Santa Ana Office (Region 8)	Protection of surface waters under the Clean Water Act	<ul style="list-style-type: none"> ▪ Clean Water Act Section 402, General Permit for Storm Water Discharges Associated with Construction Activities
State Water Resources Control Board (SWRCB)	Protection of surface waters under the Clean Water Act	<ul style="list-style-type: none"> ▪ Clean Water Act Section 401 certification
California State Lands Commission (CSLC)	State lands	<ul style="list-style-type: none"> ▪ Right-of-Way Easement
California Department of Transportation (Caltrans) – District 8	California Streets and Highways Code 660-711.21 CCR 1411.1-1411.6	<ul style="list-style-type: none"> ▪ Overload Permit ▪ Road/Highway Encroachment/Crossing Permits for activity in San Bernardino and Riverside Counties
California Department of Water Resources (DWR)	Encroachment of water lines	<ul style="list-style-type: none"> ▪ For construction activities crossing water line in Segment 2
Metropolitan Water District (MWD) of Southern California	Encroachment of Colorado River Aqueduct	<ul style="list-style-type: none"> ▪ For construction activity crossing aqueduct in Segment 6
Department of Toxic Substances Control (DTSC)	Handling hazardous materials under Hazardous Waste Control Act of 1972	<ul style="list-style-type: none"> ▪ EPA Hazardous Waste Generator ID
State Historic Preservation Office (SHPO)	Any archaeological or paleontological work	<ul style="list-style-type: none"> ▪ Cultural Resources Use Permit, Field Use Authorization, or an ARPA Permit (if required) ▪ Consultation for Section 106 of the National Historic Preservation Act
California Air Resources Board (CARB)	Portable emissions sources	<ul style="list-style-type: none"> ▪ Portable Engine Registration for specified non-mobile portable engines.
South Coast Air Quality Management District (SCAQMD)	South Coast Air Basin and Coachella Valley and portions of the Salton Sea Air Basin	<ul style="list-style-type: none"> ▪ Fugitive Dust Control Plan
Local Agencies		
Riverside County	County roads and highways, flood control/drainage channels	<ul style="list-style-type: none"> ▪ Road/Highway Encroachment/Crossing Permit ▪ Flood Control/Drainage Channel Encroachment/Crossing Permit
San Bernardino County	County roads and highways, flood control/drainage channels	<ul style="list-style-type: none"> ▪ Road/Highway Encroachment/Crossing Permit ▪ Flood Control/Drainage Channel Encroachment/Crossing Permit
Cities	City streets, sidewalks, flood control/drainage channels, lands	<ul style="list-style-type: none"> ▪ Road Encroachment/Crossing Permit ▪ Flood Control Channel Encroachment/Crossing Permit ▪ Temporary Use/Occupancy Permit, for material and storage yards ▪ Storm Water Pollution Prevention Plan
Other Utilities		
Kinder Morgan (El Paso) Natural Gas Pipeline	Activities in area of natural gas pipelines	<ul style="list-style-type: none"> ▪ Pipeline Encroachment/Crossing Permit
Questar Southern Trails Pipeline Company	Activities in area of natural gas pipelines	<ul style="list-style-type: none"> ▪ Pipeline Encroachment/Crossing Permit
Southern California Gas Company	Activities in area of natural gas pipelines	<ul style="list-style-type: none"> ▪ Pipeline Encroachment/Crossing Permit

Table A-9. Permits that May Be Required for the West of Devers Upgrade Project

Agency	Jurisdiction	Requirements
BNSF Railroad	Activities in area of railroad	▪ Encroachment/Crossing Permit Const. D-2738 and D-2739

A.5 Reader’s Guide to This EIS

A.5.1 Incorporation by Reference

SCE’s PEA, submitted as part of A.13-10-020, contains certain information that is incorporated by reference in some sections of this EIS. This document is available for public review during normal business hours at the CPUC’s Central Files (505 Van Ness Avenue, San Francisco), in local libraries (see Section I), and also via the Internet at the CPUC website at <http://www.cpuc.ca.gov/environment/info/asp/westofdevers/westofdevers.htm> and at the BLM website at <http://www.blm.gov/ca/st/en/fo/palmsprings/transmission/WestOfDeversProject.html>.

In addition, this EIS includes information provided by SCE after submittal of the original applications to the BLM and CPUC in the form of responses to data requests. The data requests and SCE’s responses are available on the CPUC’s website, under the heading of “Environmental Review” and then “Data Requests.”

A.5.2 EIS Organization

This EIS is organized as follows:

Executive Summary. A summary description of the Proposed Project, the alternatives, their respective environmental impacts and the Environmentally Preferred Alternative.

Impact Summary Tables. At the end of the Executive Summary, these tables are a tabulation of the impacts and mitigation measures for the Proposed Project.

Section A (Introduction). This discussion of the history, purpose and need for the project, and the public agency use of the EIS.

Section B (Description of Proposed Project). Detailed description of the Proposed Project and the Connected Actions. List of Applicant Proposed Measures.

Section C (Alternatives). Description of the alternatives evaluation process, description of alternatives considered but eliminated from further analysis and the rationale thereof, and description of the alternatives analyzed in Section D.

Section D (Environmental Analysis). A comprehensive analysis and assessment of impacts and mitigation measures for the Proposed Project and the Connected Actions. Each section considers the impacts of alternatives, including the No Action Alternative. This section is divided into main sections for each of 21 environmental issue areas (e.g., Air Quality, Cultural Resources) that contain the environmental settings and impacts of the Proposed Project and each alternative. At the end of each issue area analysis, a Mitigation Monitoring table is provided.

Section E (Cumulative Scenario and Impacts). A discussion of the cumulative scenario and impacts with regard to the Proposed Project and alternatives.

Section F (Other NEPA Requirements). A discussion of growth-inducing impacts, irreversible and irretrievable commitment of resources, adverse environmental effects which cannot be avoided should the Proposed

Project be implemented, the relationship between short-term uses and long-term productivity of the environment, and energy requirements and conservation potential of various alternatives and mitigation measures.

Section G (Comparison of Alternatives). Identification of the NEPA Agency Preferred Alternative and a discussion of the relative advantages and disadvantages of the Proposed Project and alternatives that were evaluated.

Section H (Proposed Mitigation Monitoring, Compliance, and Reporting Plan). A discussion of the BLM's mitigation monitoring program requirements for the project as approved by the BLM.

Section I (Public Participation). A brief description of the public participation program for this EIS.

Section J (Glossary).

Section K (Index).

Appendices:

Appendix 1	Project Description Information
	Appendix 1A – Structure Height Tables
	Appendix 1B – FAA Hazard Marking Evaluations
	Appendix 1C – Construction Equipment and Workforce Estimates
Appendix 2	Detailed Project Maps
Appendix 3	SCE-Morongo ROW Agreement – Appendix J of SCE's Application A.13-10-020
Appendix 4	EMF Field Management Plan
Appendix 5	Alternatives Screening Report
	Attachment 1 – Phased Build Alternative Supporting Data
	Attachment 2 – Project Alternatives Assessment – A Power Flow Analysis
	Attachment 3 – Existing Structures Design Review
Appendix 6	Air Quality
Appendix 7	Biological Resources
	Biological Resources Figures
	Tables of Special Status Plants and Wildlife
Appendix 8	Cultural Resources
Appendix 9	Policy Screening Report
Appendix 10	Visual Resources
Appendix 11	EIS Information Contacts
Appendix 12	Preparers and Reviewers
Appendix 13	Recipients of the EIS

A.6 References

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