Comment Set F1 – Southern California Edison

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL® Company

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September 22, 2015

VIA EMAIL

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Re: Southern California Edison's Comments to the Draft Environmental Impact Report/Environmental Impact Statement for the West of Devers Upgrade Project

To Whom It May Concern:

This letter and accompanying attachments contain the comments of Southern California Edison Company ("SCE") on the Draft Environmental Impact Report/Draft Environmental Impact Statement ("DEIR/DEIS") for the West of Devers Upgrade Project ("WOD Upgrade Project" or "Proposed Project"). SCE appreciates the time and effort that went into developing the DEIR/DEIS and submits these comments in order to ensure that the analysis in the Final EIR/EIS is both complete and accurate. F1-1

I. INTRODUCTION

In the DEIR/DEIS, the California Public Utilities Commission ("CPUC") concludes that the Phased Build Alternative (an alternative developed by the authors of the document, the CPUC and the Bureau of Land Management ("BLM")), is the environmentally superior alternative.[1] For inexplicable reasons, the authors of the document have proposed a Phased Build Alternative which deviates significantly from the very purpose of the Proposed Project, contravenes the policy of the State of California to efficiently provide for the delivery of renewable energy resources to customer load, may be technically infeasible to construct, and creates higher net environmental impacts than the Proposed Project due to:

- visual impacts,
- physical footprint, and
- a requirement to enter the project corridor for extensive construction activities not once, but twice, to construct a project alternative that is inferior to the Proposed Project.

As demonstrated below, the DEIR/DEIS conclusion that the Phased Build Alternative is environmentally superior is fatally flawed.

[1] The BLM will select its Environmentally Superior Route in the Final EIR/EIS.

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First, the Phased Build Alternative does not meet most of the project objectives and therefore is not a viable alternative under the California Environmental Quality Act ("CEQA"). The Phased Build Alternative does not meet the project objectives articulated by the authors in the DEIR/DEIS, nor does it meet SCE's project objectives (which should be adopted as the project objectives in the Final Environmental Impact Report ("FEIR/FEIS")). Simply put, the Phased Build Alternative fails to meet the basic purpose and need for the Proposed Project.

Second, the Phased Build Alternative is not feasible as defined by CEQA. For an alternative to be considered feasible, CEQA requires that it is capable of being developed in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. That is not the case here. The Phased Build Alternative is technologically flawed, raising questions of whether it can be safely constructed in the right-of-way ("ROW"). In order to install the Phased Build Alternative's 795 Aluminum Conductor Composite Reinforced ("ACCR") conductor, planned wire sites would need to be modified and new wire sites would be required. These wire sites may need to be located within areas not previously analyzed. These areas could potentially be environmentally sensitive or located outside the existing ROW. The DEIR/DEIS does not recognize this important aspect of the Phased Build Alternative's features, thereby omitting these meaningful impacts— impacts that would not be caused by the Proposed Project. Given these undesirable characteristics of the Phased Build Alternative, SCE considers it to be technologically infeasible under CEQA.

The Phased Build Alternative is also legally and economically constrained because the construction methods necessary to construct the Phased Build Alternative will require extended double-, triple- or quadruple-line outages of the existing transmission system that is being modified. The California Independent System Operator ("CAISO") is unlikely to approve such extensive outages which could place the system at risk of not meeting reliability standards. Even if it did, such outages would lead to substantial generator curtailment, causing significant economic loss to generators currently connecting to the West of Devers lines. Additionally, the Phased Build Alternative would be legally infeasible if the Morongo Band of Mission Indians were to determine that by failing to obtain a CPCN for the Proposed Project, SCE has not met its contractual and legal obligations contained in the Proposed Transaction.[2] The Phased Build Alternative is also infeasible from a regulatory perspective, as it only satisfies a portion of the need for the project. The Phased Build Alternative provides for approximately one third less, or about 1000 MW less deliverability, compared to the Proposed Project. If the Phased Build Alternative were constructed, it is reasonably foreseeable that additional transmission capacity would be needed in the near-term, and there is currently not enough time to license and construct such a project, as transmission projects take many years to successfully license and construct. This risk is accentuated by the passage of SB 350 and increasing the RPS to 50% by 2030, which will likely have the effect of spurring additional renewable generation, the transmission of which is a key objective of the Proposed Project.

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2 As discussed in SCE's Application and testimony, SCE and Morongo Transmission entered into a Development and Coordination Agreement that provides Morongo Transmission the option to lease transfer capability right in a portion of the Proposed Project in exchange for the Morongo Tribe's consent to the ROW agreement that permits the Proposed Project to be built across the tribal trust lands of the Morongo Tribe. In sum, this transaction is referred to as the Proposed Transaction.

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Third, the Phased Build Alternative would result in greater environmental impacts than the Proposed Project by requiring SCE to remobilize construction efforts multiple times over subsequent phases to achieve what could have been accomplished in a single coordinated construction effort, resulting in extended disturbance periods, reduced efficiencies, and greater impacts. These increased environmental effects factor into the infeasibility of the Phased Build Alternative under CEQA. **F1-1 cont.**

Fourth, without fully analyzing or understanding the scope of the Phased Build Alternative, the DEIR/DEIS asserts that the Phased Build Alternative would have a reduced construction timeframe and would cost less than the Proposed Project. This is wrong. This unsubstantiated conclusion in the DEIR/DEIS completely misses and understates the necessary project scope elements, design and engineering work, conductor procurement and testing efforts, and construction requirements needed to actually build the Phased Build Alternative. The DEIR/DEIS then errs by making an inapt comparison of the cost of the Phased Build Alternative to SCE's Proposed Project, as it does not consider the reduced capacity of the first phase of the Phased Build Alternative, as well as the cost of the next phase of the Phased Build Alternative.

Further, the introduction of an entirely new alternative based on the "Project Alternative Assessment A Power Flow Analysis" prepared by the CPUC's transmission consultant, ZGlobal,[3] and then the selection of that alternative as the environmentally superior alternative, is inconsistent with how Certificate of Public Convenience and Necessity ("CPCN") applications are evaluated by the CPUC. The CEQA track of the proceeding evaluates the environmental impacts of the proposed project and a reasonable range of alternatives. SCE recognizes that it is appropriate for the DEIR/DEIS to consider alternatives that were not included in SCE's Proponent's Environmental Assessment ("PEA") if the CPUC and BLM determine that is necessary under CEQA and the National Environmental Policy Act ("NEPA"). However, here, the CPUC and BLM developed an entirely new alternative based on an untested and flawed analysis by ZGlobal. This is inappropriate because the CEQA track of the proceeding is not the place where the need determination should be made. Instead, the need determination will be established in the case-in-chief, where SCE will have the opportunity to file its own testimony, rebut counter testimony, and cross-examine witnesses. It puts the cart before the horse to rely on ZGlobal's analysis in the DEIR/DEIS before it has been subjected to critique in the case-in-chief. As explained in the attached comments, ZGlobal's analysis is fatally flawed—it does not adequately evaluate system needs and cannot be relied upon for transmission planning purposes or to determine the scope of the Proposed Project. It is misleading to the public and decision-makers to present the Phased Build Alternative as a viable environmental option when it fails to meet the project objectives and may be infeasible to implement. At a minimum, the DEIR/DEIS needs to clarify that the system planning assessment underpinning the Phased Build Alternative is preliminary and untested and may change following the case-in-chief testimony.

The DEIR/DEIS requires SCE to obtain a variance from local jurisdictions if SCE's construction will conflict with local noise ordinances. The CPUC has made clear that regulated public utilities are not required to obtain local agency discretionary approvals related to the construction of major transmission lines, such as the Proposed Project, including local noise **F1-2**

[3] DEIR/DEIS, Appendix 5, "Alternatives Screening Report."

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variances. This well-established authority is grounded in the California Constitution, the Public Utilities Code, and General Order 131-D. Further, CEQA does not require a local agency noise variance to address this impact because all feasible mitigation measures are already being applied to reduce the noise impacts. A variance may also be infeasible under CEQA. Despite SCE's protests, in recent transmission licensing projects, the CPUC has ordered SCE to obtain a variance from local jurisdictions. In some of those instances, local agencies have declined to grant variance requests in a reasonable period of time, nothwithstanding SCE's best efforts. For these reasons, the requirement to obtain a variance from local noise ordinances should be stricken from the DEIR/DEIS or, at a minimum, modified based on the language proposed by SCE. **F1-2 cont.**

SCE also has serious concerns about the visual analysis in the DEIR/DEIS. The mitigation for construction impacts, for both SCE's Proposed Project and the Phased Build Alternative, creates a process whereby, *after* the EIR/EIS is approved, staff will *re-analyze* every spur road, retaining wall, and ground disturbance area within Segments 2, 3, 4 and 6, resulting in an unknown number of project design changes even though the information is already available to include such analysis in the EIR/EIS. These design changes may raise new environmental or engineering constraints, which could lead to further delays and uncertainty. This mitigation strategy is fundamentally flawed and not allowed under CEQA. For operational impacts, the DEIR/DEIS identifies four discrete locations with significant visual impacts. For the large majority of the Proposed Project's 48 corridor miles, impacts will either be beneficial or less than significant. Nevertheless, the DEIR/DEIS imposes onerous mitigation measures across the entirety of the project. Simply put, this is not consistent with CEQA. Mitigation can only be required to reduce significant impacts and if this is applied, it must be limited in scope by having an "essential nexus" to the nature of the impact and be "roughly proportional" to the scale of the impact. SCE proposes removal of applicable mitigation measures in order to make the DEIR/DEIS compliant with CEQA. **F1-3**

Lastly, SCE asserts that the renewable solar generation projects utilizing the West of Devers lines are more appropriately analyzed in the DEIR/DEIS as "cumulative impacts" rather than "connected actions." As explained in Section VIII, below, NEPA sets forth a specific test for determining whether or not projects should be considered "connected actions" for purposes of environmental analysis. Here, the renewable solar generation projects should be considered "cumulative impacts" not "connected actions," as per the NEPA standard. **F1-4**

In addition to the general comments described herein, SCE has also prepared a detailed narrative demonstrating that the Phased Build Alternative does not meet the need for the WOD Upgrade Project, as well as a specific comment table specifically addressing various sections of the DEIR/DEIS. These documents are attached as Attachment A and B, respectively.

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II. THE PHASED BUILD ALTERNATIVE DOES NOT MEET MOST OF THE PROJECT OBJECTIVES AND SHOULD BE REJECTED

F1-5

A. CEQA Requires Alternatives To Meet Most Of The Project Objectives

CEQA requires an EIR to focus on alternatives that can eliminate or reduce significant environmental impacts while attaining most of the project objectives. CEQA Guidelines § 15126.6(a)-(b).

Case law recognizes using the applicant's project objectives to determine the reasonable range of alternatives. In *Sierra Club v. County of Napa*, 121 Cal. App. 4th 1490 (2004), the court upheld an agency's reliance on the project applicant's objectives both to narrow the scope of alternatives, and, ultimately, to reject some alternatives as infeasible. In *Sierra Club*, Beringer winery submitted an application to the County of Napa to develop a 1.4 million square foot winery. In proposing the project, Beringer identified several objectives related to expanding and consolidating its wine-making and warehousing facilities. *Id.* at 1496.

The County's EIR concluded that Beringer's project would have significant and unavoidable impacts on wetlands. The EIR analyzed six alternatives to the project, but eliminated three of the alternatives as infeasible for "not meeting Beringer's objectives." *Id.* The County then proceeded to approve Beringer's Proposed Project. Sierra Club challenged the approval, asserting that the project objectives were drawn too narrowly. The Court of Appeal upheld the County's approval, finding that "the project is the only feasible means of accomplishing Beringer's objective." *Id.* at 1508.

SCE is aware of case law supporting a lead agency's discretion to change an applicant's project objectives to ensure a full range of alternatives are analyzed in the EIR in order to reduce environmental impacts. *See, e.g., Save Round Valley Alliance v. County of Inyo*, 157 Cal. App. 4th 1437 (2007) (applicant's narrow project objectives could not be used to avoid consideration of alternative site with fewer environmental impacts). However, SCE is not familiar with any case where a lead agency eliminated an applicant's project objectives that were aimed at reducing environmental impacts and meeting regulatory standards, as is the case here.[4]

Specifically, for West of Devers, SCE identified six basic objectives:[5]

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.

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4 It is important to note that the Phased Build Alternative fails to reduce environmental impacts while also failing to meet the project need, as described in more detail below.

5 Proponent's Environmental Assessment, Section 1.3.

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3. Meet project need while minimizing environmental impacts.

F1-5 cont.

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.

In turn, the DEIR/DEIS identifies the following three "Basic Project Objectives"[6]:

- 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 megawatts (MW).

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

- 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.

Accordingly, the DEIR/DEIS *eliminates* SCE's project objectives #3 (minimizing environmental impact), #5 (comply with reliability standards) and #6 (construct facilities in a timely and cost-effective manner, while minimizing service interruptions) and *narrows* objective #1 by focusing only on the first phase of solar generation projects instead of the reasonably foreseeable projects identified by SCE and the CAISO. The DEIR/DEIS does not explain the basis for eliminating objectives #3, 5 and 6, which are aimed at reducing environmental impacts and utility customer costs while maintaining reliability.

As described next, the Phased Build Alternative does not ensure that SCE's objectives #1, 3, 5 and 6 can be met. Furthermore, even if SCE's objectives are ignored, the Phased Build Alternative does not meet two out of the three "Basic Project Objectives" identified in the DEIR/DEIS.

B. The Analysis Of The Phased Build Alternative Is Flawed

F1-6

As described in more detail in Attachment A, SCE believes that the technical analysis that led to the conclusion that the Phased Build Alternative met the Basic Project Objectives is severely

[6] DEIR/DEIS, pp. A-11-A-14.

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flawed. There are numerous errors in the underlying assumptions, as well as the alleged capabilities of the Phased Build Alternative. F1-6 cont.

SCE believes that the Phased Build Alternative would likely require additional transmission elements such as a Remedial Action Scheme ("RAS") and 600 MVAr of shunt capacitance, consisting of several smaller capacitor banks installed at multiple locations. These additional transmission elements were not analyzed for environmental or cost impact in the DEIR/DEIS, leading to a smaller scope and impact than the Phased Build Alternative would actually have.

Further, the ZGlobal studies used the CAISO's reliability base cases without making the necessary changes to the generation dispatch assumptions to determine delivery network upgrade is flawed and inconsistent with the CAISO's deliverability study methodology. The generation dispatch levels set by the CAISO in the Reliability base cases are intended to eliminate any network upgrades driven by the addition of new generation and only identify upgrades needed to serve the load forecast. For example, the CAISO's 2024 Reliability Base Case that was used to validate the DEIR/DEIS Phase Build Alternative limits Photovoltaic and Solar Thermal to 36% and Wind resources to 0% of its maximum capability. This low generation dispatch level is inadequate to identify delivery network upgrades needed to provide FCDS. Using the reliability base cases without accounting for the deliverability requirements of the generation that has executed agreements and that are in queue presents an inaccurate forecast of the actual system needs in the West of Devers corridor.

Additionally, as described in more detail in Attachment A, the ZGlobal studies inaccurately stated that the amount of generation that needs the WOD Upgrade Project for deliverability was 1,881 MW. This amount ignores 985 MW that are already interconnected and have Full Capacity Deliverability Status as a result of the Interim West of Devers Project, which will not provide any deliverability benefits once the WOD Upgrade Project is constructed.

C. The Phased Build Alternative Does Not Meet Most Of SCE's Project Objectives

F1-7

As stated above, the Phased Build Alternative would not allow SCE to meet objectives #1, 3, 5 and 6. With respect to objective #1, as described in Attachment A to this letter, the Phased Build Alternative would limit the amount of new generation that could be interconnected and fully delivered. Only one of the Power Flow Cases analyzed by the DEIR/DEIS found the Phased Build Alternative to be feasible.[7] However, this Case limited the amount of generation that would be interconnected in the Blythe and Dessert Center areas to only 1,387 MW. This is far less than the 1,859 MW that already has executed interconnection requests requiring the WOD Upgrade Project for Full Capacity Deliverability Status ("FCDS") and completely ignores the remaining generation in queue. Currently there are 6,072 MW of generation in the CAISO queue that would all require the WOD Upgrade Project to support FCDS. While not all of that generation may ultimately develop, given that the total designated Renewable Resource Portfolio for Riverside East and the Imperial area (to meet the 33% renewable goal by 2024) is 4,767 MW, SCE believes that the Phased Build Alternative significantly limits the ability of renewable projects in those areas to be developed and have FCDS. In other words, for purposes of CEQA, it is reasonably foreseeable that some of the 6,072 MW of generation and in the CAISO queue will be developed, and it is *not*

[7] DEIR/DEIS, Appendix 5, Attachment 2, ZGlobal Case 3, pg. 10.

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reasonable to assume that none of this generation will be developed. This risk is accentuated by the passage of SB 350 and increasing the RPS to 50% by 2030, which will likely have the effect of spurring additional renewable generation. F1-7 cont.

With respect to objective #3, the Phased Build Alternative does not meet the Project need while minimizing environmental impact. As described in Section IV.B below, the Phased Build Alternative would lead to greater environmental impacts as future phases would be needed in the near term future.

With respect to objective #5, SCE believes that the Phased Build Alternative would require additional transmission upgrades not identified in the DEIR/DEIS that would need to be installed in order to alleviate reliability concerns.

Further, the Phased Build Alternative also does not meet objective #6. As described in Section III.B below, construction of the Phased Build Alternative would require extensive double-line outages, and potentially some triple- and quadruple-line outages, which may violate reliability criteria. The construction of additional phases would involve significant curtailment of generation that is already interconnected and delivering power.

Given the CEQA mandate that the Project Alternatives must meet and attain most of the project objectives, SCE cannot understand how the DEIR/DEIS could conclude that the Phased Build Alternative would meet the project objectives, either as stated by SCE or even in the reduced form as set forth in the DEIR/DEIS, as discussed next.

D. The Phased Build Alternative Does Not Meet Two Of The Three "Basic Objectives" Identified In The DEIR/DEIS

F1-8

First, the Phased Build Alternative does not meet the DEIR/DEIS's Basic Objective 1 to increase system deliverability by at least 2,200 MW. In the ZGlobal Study, only one case (Case 3) supported the 795 ACCR conductor as a feasible alternative conductor, and that case only adds a small fraction of the transmission capability needed to meet the renewable project deliverability needs of the Proposed Project. As further described in Attachment A, a detailed review of Case 3 indicates that it only assumed 1,387 MW of generation resources at Red Bluff and Colorado River Substations. Today, there is already 1,050 MW of generation in service at Red Bluff and Colorado River Substations.[8] Therefore, based on Case 3, there would only be 337 MW of additional new resources that could be developed at both Colorado River and Red Bluff Substations, significantly less than the 1,929 MW[9] with executed generator interconnection agreements at this time and significantly less than the Basic Objective 1 minimum deliverability requirement. Moreover, Case 3's assumption of only 337 MW of new generation at Colorado River and Red Bluff Substations significantly downplays the importance of both the Colorado River and Red Bluff Substations for

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8 The WOD upgrade has been identified by CAISO and SCE as a required Delivery Network Upgrade for generation projects located Colorado River and Red Bluff Substations. The Colorado River and Red Bluff Substations are designed to interconnect renewable developments in the Blythe and Desert Center areas. The flow from Colorado River and Red Bluff Substations ultimately flow through the WOD corridor.

9 The 1,929 MW consist four projects (Q294, 365, 576, and 643AE), totaling 1,359MW, require the WOD upgrades for FCDS and two projects (Q17 and 219) totaling 570MW that would increase the flow on the WOD corridor.

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interconnecting new renewable resources. It is reasonably foreseeable, indeed, even highly likely, that there will be more than 337 MW of new generation connecting at Colorado River and Red Bluff Substations. Given the reasonable foreseeability of such generation, it is improper under CEQA and NEPA to exclude this generation in the development of an alternative to the project. **F1-8 cont.**

The Phased Build Alternative[10] was assumed to provide 3,000 MW of deliverability. This assumption was not supported by any study performed by ZGlobal. To determine the actual MW of deliverability provided by the Phase Build Alternative, a deliverability study is needed consistent with the CAISO's deliverability study methodology. Since ZGlobal's Case 6 determined that the use of the 795 ACCR conductor would limit the flow through the West of Devers corridor to 1,900 MW due to system instability and excessive reactive power losses, SCE believes that the use of 795 ACCR conductor could introduce a new bottleneck that would limit the MW of deliverability. This would ultimately lead to a project that does not maximize the use of this critical transmission corridor.

These flaws highlight the error in developing an entirely new alternative based on a third-party analysis before SCE is given a chance to review and critique the analysis and cross-examine its preparers in the case-in-chief. ZGlobal's analysis is fatally flawed and does not adequately evaluate system needs and cannot be relied upon for transmission planning purposes or to determine the scope of the Proposed Project. At a minimum, the DEIR/DEIS needs to clarify that the system planning assessment underpinning the Phased Build Alternative is preliminary and untested and may change following the case-in-chief testimony. SCE believes that upon such scrutiny, the Phased Build Alternative will be shown to be far inferior in its ability to deliver incremental renewable energy.

Second, the Phased Build Alternative does not meet Basic Project Objective 2: to support achievement of State and federal renewable energy goals because the Phased Build Alternative would significantly limit the corridor transfer capability. SCE's review of the ZGlobal studies found that the Phased Build Alternative would limit the corridor transfer capability to approximately 1,900 MW.[11] As President Picker recently stated, "long-standing state policies incorporated as the Garamendi Principles call for expanding transmission within existing corridors."[12] Here, the Phased Build Alternative conflicts with that policy, as it limits the corridor capacity. As a result of limiting the corridor capability, the Phased Build Alternative would purposely introduce a barrier to the achievement of State and federal renewable energy goals. Given that West of Devers is a critical corridor for renewable developments in the Riverside East and Imperial Valley areas, the Phased Build Alternative would become a barrier for future renewable generation development in these areas to achieve deliverability. The total designated Renewable Resource Portfolio for Riverside East and Imperial zones to meet 33% by 2024 is 4,767MW as identified in the Revised 2015-2016 Renewable Portfolios Transmittal Letter.[13] The Phase Build Alternative would become a barrier to facilitate SCE's and other California utilities' requirement of achieving and maintaining California's 33% Renewable Resource Portfolio. This **F1-9**

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10 DEIR/DEIS Appendix 5, page Ap. 5-48.

11 ZGlobal Case 6 Study, Appendix 5, Attachment 2, pg. 12.

12 Concurrence of Commissioner Picker, D.15-05-004.

13 http://www.caiso.com/planning/Pages/TransmissionPlanning/2015-2016TransmissionPlanningProcess.aspx.

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limitation of the Phased Build Alternative and its inability to meet Basic Project Objective 2 is magnified by the passage of SB 350, which increases the RPS to 50% by 2030. F1-9 cont.

III. THE PHASED BUILD ALTERNATIVE IS NOT FEASIBLE UNDER CEQA AND SHOULD BE REJECTED F1-10

CEQA defines "feasible" as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors.[14] Based on this definition, the Phased Build alternative is not feasible under CEQA because it cannot be accomplished in a successful manner within a reasonable period of time, taking into account:

- Technology constraints with the 795 ACCR conductor (as opposed to the 1590 ACSR conductor proposed by SCE). The unique wire stringing limitations of the 795 ACCR conductor would require SCE to expand the sizes of currently planned wire stringing sites and to add new sites. These sites may need to be located within environmentally sensitive areas not previously analyzed, or outside of the ROW, potentially resulting in the need for purchase or condemnation of property.

- Legal and economic constraints that limit the feasibility of assuming multiple outages required for the Phased Build Alternative. Based on SCE's experience, it is not likely that the CAISO would approve extended double-, triple- or quadruple-line outages on the West of Devers lines for the Phased Build Alternative. However, even if CAISO did approve such outages, it would lead to substantial generator curtailment, causing significant economic loss to generators currently connecting to the West of Devers lines.

- Regulatory constraints associated with the Phased Build Alternative's assumption that subsequent corridor upgrades can be completed "just in time" to meet increased demand. The time required to obtain new approvals from the CPUC and BLM may make it infeasible to construct upgrades to the Phased Build Alternative in time to meet system deliverability requests, creating a major potential risk to reliability. This risk is accentuated by the passage of SB 350 and increasing the RPS to 50% by 2030, which will likely have the effect of spurring additional renewable generation.

- Environmental constraints caused by the increased environmental impacts from the Phased Build Alternative, which will require SCE to remobilize construction efforts multiple times over subsequent phases to achieve what could have been accomplished in a single, coordinated construction effort contemplated by the Proposed Project, resulting in extended disturbance periods, reduced efficiencies and greater impacts.

The following subsections and Section IV describe each of these constraints in more detail and additional information is included in our broader comments. In short, even if some constraints can be minimized or avoided, the combination of feasibility constraints results in a conclusion that

[14] Public Resources Code § 21061.1; CEQA Guidelines § 15364.

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the Phased Build Alternative cannot be successfully completed in a reasonable period of time. For these reasons, the Phased Build Alternative is not a feasible option under CEQA and should be rejected. **F1-10 cont.**

A. Construction of The Phased Build Alternative May Be Technically Infeasible

The DEIR/DEIS did not take into account critical construction factors that render the Phased Build Alternative significantly more difficult, and potentially infeasible, to construct. Because these construction constraints are potentially insurmountable, SCE cannot say with certainty that the Phased Build Alternative can be safely constructed in the West of Devers corridor. SCE, therefore, asserts that the Phased Build Alternative is not feasible due to construction constraints, as described in more detail below.

The Phased Build Alternative specifies the use of 795 ACCR conductor as opposed to the 1590 ACSR ("Aluminum Conductor Steel Reinforced)" conductor proposed by SCE for the Proposed Project. According to 3M, the manufacturer of 795 ACCR conductor,[15] there are specific maximum allowable bending angles that cannot be exceeded when pulling ACCR conductor.[16] In contrast, the bending constraints for the 1590 ACSR conductor proposed by SCE, are significantly less restrictive.[17] The practical effect of this difference is that SCE's Proposed Project allows constructing wire sites (the large footprint temporary sites needed to station conductor reels and pulling equipment) at a much greater angle from the path of the transmission line being constructed. These greater angles are not possible when using the less flexible 795 ACCR conductor proposed in the Phased Build Alternative. This technical difference has major environmental consequences that are completely ignored in the DEIR/DEIS.

In order to safely construct the Phased Build Alternative in the West of Devers corridor, SCE would need to establish new wire sites and/or expand proposed wire sites to accommodate wire stringing of 795 ACCR conductor. The corridor traverses rugged terrain, and several residential communities have been developed adjacent to the corridor, limiting prospective real estate available for stringing setup areas. There are very few locations where SCE could site additional pulling and tensioning locations to support the installation requirements of the 795 ACCR conductor without conducting extensive grading or locating wire sites outside the existing ROW.

SCE was well aware of the ROW constraints when it planned the Proposed Project. The wire sites were carefully chosen so as to minimize earth moving, disturbance to residents, disturbance to jurisdictional waterways, critical habitats and condemnation of residential parcels. Preliminary examination of the Phased Build Alternative indicates that SCE would be required to redesign the wire stringing plan to support stringing of 795 ACCR conductor to assure pulling

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15 Manufacturer 3M is referenced in Appendix 5 to the DEIR/DEIS as the manufacturer of the 795 ACCR conductor.

16 3M website at http://multimedia.3m.com/mws/media/585820O/3m-accr-installation-maintenance-guidelines.pdf.

17 *IEEE Guide to the Installation of Overhead Transmission Line Conductors*, IEEE Std. 524 -2003, The Institute of Electrical and Electronics Engineers, Inc., March 12, 2004.

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angles are maintained within manufacturer recommendations. Revisions to the wire stringing plan would include modifications to existing and new wire sites. These wire sites could be located in environmentally sensitive areas and/or require additional rights outside of the current ROW that could require condemnation. Without completing a new wire stringing plan that fully evaluates the physical topography of the corridor, the location of the new and existing towers, and the wire stringing angle limitations of the conductor, SCE cannot establish the feasibility of installing 795 ACCR conductor as an alternative to 1590 ACSR conductor. Even if it is feasible to relocate wire sites within areas suitable to limit wire stringing angle to within the manufacturer's specification, the environmental effects of such relocations need to be acknowledged. The DEIR/DEIS not only fails to assess the feasibility of construction with the different conductor type, it also fails to analyze or acknowledge the significant environmental impact thereof. **F1-10 cont.**

B. Legal and Economic Constraints Limit The Feasibility Of Multiple Outages Required By The Phased Build Alternative **F1-11**

The Phased Build Alternative would require multiple outages of the currently existing West of Devers 220 kV transmission lines, over a significant period of time. The current West of Devers corridor contains four 220 kV circuits. In order to safely upgrade or make changes to that corridor, some of these existing lines must be de-energized. De-energizing circuits is commonly referred to as taking an outage. Because the four circuits in the West of Devers corridor are currently operating at full capacity, SCE designed the construction plan for the Proposed Project specifically to limit the amount and duration of required outages consistent with SCE's Basic Project Objective #6. More importantly, the Proposed Project construction plan limits both the number of double-line outages (de-energization of two circuits at one time) and the duration of such outages. SCE could safely construct the Proposed Project while limiting any required double-line outages to less than 24 hours in duration. In contrast, in order to safely construct the Phased Build Alternative, SCE would need to take multiple double-, and possibly triple- or quadruple-line, outages of up to six months in duration.[18] This means that for up to six months at a time, multiple times during the four-plus-year construction schedule, two or more of the four circuits in the West of Devers corridor would be out of service.

SCE does not control when outages are allowed, as the scheduling of outages is solely within the jurisdiction of the CAISO. As SCE explained in response to the Energy Division's data request questions ALT-17A and ALT-17B, however, SCE suspects that the CAISO is not likely going to approve extended double-, triple- or quadruple-line outages on the existing West of Devers lines due to the negative system impacts such extended and significant outages would cause. However, even if CAISO did approve such outages, it would lead to significant generator curtailment, causing significant economic loss to those generators currently connecting to the West of Devers line and would not meet SCE's Basic Project Objective #6. If the Phased Build

[18] The Phased Build Alternative requires, in part, stringing conductor on existing towers, whereas the Proposed Project requires stringing conductor on new towers. With minor exceptions, the Proposed Project design placed the new towers in such a location that the construction could proceed without having to de-energize more than one of the four existing 220 kV circuits for long periods of time. Because the Phased Build Alternative requires stringing conductor on currently existing towers, that alternative will require additional outages. Furthermore, the bending angle constraints of the Phased Build Alternative limit the placement of wire sites, such that more outages will be required in order to maintain clearance for safe construction.

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Alternative were constructed, the curtailment impact of the line outages would be even further magnified for future phases of construction on the West of Devers lines. In that scenario, when subsequent upgrades are required, the corridor would be further loaded, leading to even more curtailment when subsequent construction double-, triple- or quadruple-line outages would be required. These costs limit the economic feasibility of the Phased Build Alternative. F1-11 cont.

C. The Phased Build Alternative Is Infeasible From a Regulatory Perspective

F1-12

The time required to obtain new approvals from the CPUC and BLM may make it infeasible to construct upgrades to West of Devers in time to meet system deliverability requests, creating an inability to meet the interconnection requirements for renewable projects which may be required to meet RPS goals. The Phased Build Alternative is premised on a dubious assumption that new phases can be constructed "just in time" as new demand materializes. The DEIR/DEIS simply states that "future phases" under the Phased Build Alternative will be constructed "as generation projects become certain and capacity is clearly required."[19]

This gloss belies the complexity involved with building new transmission infrastructure in California – a process driven by multi-year planning cycles at the CAISO and CPUC, an extended environmental review and approval process, and a construction schedule often extended due to environmental factors such as nesting birds. The DEIR/DEIS fails to analyze the feasibility of achieving the upgrades in a reasonable period of time, particularly if needs develop faster than the DEIR/DEIS assumes.

The DEIR/DEIS does not address *which* agency will determine that "capacity is clearly required" (i.e., whether the CAISO who already found the need to exist, or the CPUC will also determine system need?), *in what proceeding* this determination will be made (i.e., as part of the CAISO's Transmission Planning Process, or a new CPUC proceeding focused on transmission planning and forecasting?), or whether this determination *will be made early enough* to ensure that SCE has time to prepare an application (which will require extensive environmental studies and engineering design), complete the CEQA/NEPA review, obtain all necessary approvals and complete construction in the challenging corridor before the new demand is online.

CPUC staff has acknowledged that it can take four to nine years to prepare an application, permit and construct a new transmission line.[20] Using the West of Devers Project as an example, SCE filed its CPCN Application in October 2013 and under the current pace, a decision is not likely until 2016, which is well over 2 years since the application was filed. Taking into account engineering, environmental studies and time to develop the PEA, it will have been 4 years prior to even getting a decision on the project, let alone the approximately 48-months minimum it is anticipated to take to build the project. Even assuming upgrades are not needed until 2024 as indicated in the DEIR/DEIS ("it may be 10 years [i.e., by 2024] before additional upgrades are

[19] DEIR/DEIS, p. C-25.

[20] CPUC, "Processes for Planning and Permitting Electric Transmission Projects in California," (Oct. 2011), available at http://www.cpuc.ca.gov/NR/rdonlyres/6D4D8AA9-CF49-4194-A4C6-DF394317EA6B/0/CPUCSidesFresnoAssmblyComTransmissionOct242011.pdf, Slide 7.

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needed"),[21] SCE would have to begin the application and PEA *years in advance, before 2020*, given the following estimated timelines: F1-12 cont.

- Approximately 6 to 12 months to update environmental studies for the PEA, including for biological and cultural resources;
- Approximately 9 to 12 months to prepare the PEA, engineering design and application;
- Approximately 18 to 30 months to obtain approvals from the CPUC and, if needed, BLM, including the environmental review and public involvement process, which makes timing difficult to predict because areas of controversy can substantially extend the process; and
- Approximately 48 months or more to complete construction, resulting in a total time period of approximately **7 to 9 years**.

Based on this timing, the Phased Build Alternative would require SCE to re-start the application process to upgrade West of Devers to meet needs in 2024 well before the end of 2022, which is the earliest this alternative project could be operational. In other words, the alternative creates a "do loop" where SCE must re-start the permitting process for the next phase, before the first phase is even energized. Even if the CPUC and BLM could support such a rapid re-start, let alone allow SCE to conduct its environmental studies and engineering on a future not yet completed base line, it is far from clear that SCE could obtain other agency approvals in a timely manner (e.g., endangered species take coverage) or satisfy other obligations. And if needs materialize before 2024, the likelihood of completing the upgrades in time becomes even less tenable.

Taken as a whole, it is simply not feasible under the current regulatory framework to assume the West of Devers Upgrade Project can be re-permitted to accommodate subsequent upgrades needed by 2024 or earlier.

IV. THE PHASED BUILD ALTERNATIVE DOES NOT REDUCE ENVIRONMENTAL IMPACTS COMPARED TO THE PROPOSED PROJECT F1-13

A. By "Chopping Up" Or "Segmenting" The Project, The DEIR/DEIS Ignores The Environmental Impacts Of The Whole Of The Action, Which CEQA And NEPA Prohibit

CEQA requires an analysis of the "whole of an action, which has the potential for physical impact on the environment." CEQA Guidelines § 15378(a). In other words, CEQA prohibits a lead agency from "chopping up" a single project into smaller individual subprojects to avoid responsibility for considering the environmental impact of the project as a whole. *Orinda Ass'n v. Board of* Supervisors, 182 Cal. App. 3d 1145, 1171 (1986); *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora*, 155 Cal. App. 4th 1214, 1223 (2007) (CEQA "cannot

[21] DEIR/DEIS, p. C-25.

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be avoided by chopping up Proposed Projects into bite-sized pieces which, individually considered, might be found to have no significant effect on the environment or to be only ministerial."). This is often referred to as a prohibition against "piecemealing" a larger project. F1-13

In the seminal case of *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal. 3d 376 (1988), the California Supreme Court set aside an EIR for failing to analyze the impacts of a reasonably foreseeable multi-phase project. The case involved a plan by the University of California to move its school of pharmacy to a new building, of which only about one-third was initially available. *Id.* at 393. The EIR acknowledged that the school would eventually occupy the remainder of the building, but the EIR only discussed the environmental effects relating to the initial move. *Id.* at 396. The court concluded that the EIR should have analyzed both phases. *Id.* at 399. In so holding, the court announced the following test: "[A]n EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." *Id.* at 396.

NEPA has a similar prohibition against "segmenting" a project to avoid full environmental review. *See, W. Radio Servs. Co. v. Glickman*, 123 F.3d 1189, 1194 (9th Cir. 1997) ("NEPA prevents an agency from illegally segmenting projects in order to avoid consideration of an entire action's effects on the environment").

The DEIR/DEIS does exactly what CEQA and NEPA prohibit by "chopping up" or "segmenting" the Proposed Project to focus solely on an initial phase instead of the whole of the action. The DEIR/DEIS does this by creating an artificially narrow "Basic Project Objective 1" designed to "increase system deliverability by at least 2,200 MW," which the DEIR/DEIS acknowledges covers only "the ***initial*** group of 5 solar power generation projects that was planned."[22]

However, as explained in Section II, above, Basic Project Objective 1 improperly ignores subsequent upgrades that are reasonably foreseeable to occur, and, indeed, are very likely to occur in the near term. The reasonable foreseeability of future generation is made even more likely when viewed through the lens of recent policy developments that will encourage renewable generation in California. On January 5, 2015, Governor Brown announced a goal to increase California's Renewables Portfolio Standard to 50% by 2030, and on April 29, 2015, Governor Brown issued Executive Order B-30-15, establishing statewide greenhouse gas reduction targets of 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050. The 50% RPS was recently codified into law with the passage of SB 350. Further, the California Air Resources Board has relied heavily on increasing renewable generation as a key goal for achieving greenhouse gas reductions. In addition, on September 26, 2014, the DEIR/DEIS for the Desert Renewable Energy Conservation Plan ("DRECP") was released, advancing plans to facilitate development of renewable resources within the DRECP area. Furthermore, the Commission itself in conjunction with the California Energy Commission have recently begun the process to establish a Renewable Energy Transmission

[22] DEIR/DEIS, p. A-11.

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Initiative ("RETI") 2.0 initiative that describes the *inevitable* need for more transmission infrastructure to meet these State policy goals. **F1-13 cont.**

The DEIR/DEIS' approach to Basic Project Objective 1 is analogous to the EIR that was overturned in *Laurel Heights*, where the lead agency inappropriately focused on only the initial phase of a multi-phase project. Instead, the DEIR/DEIS should evaluate the deliverability need identified by the Proposed Project, which constitutes the whole of the action.

The Phased Build Alternative is a false solution because it only purports to satisfy the narrow system deliverability needs identified in Basic Project Objective 1, while recognizing that "future phases" "would be implemented as generation projects become certain and capacity is clearly required."[23] The DEIR/DEIS' attempt to rationalize a piecemealed approach is that "it may be 10 years [i.e., by 2024] before additional upgrades are needed."[24] This assumption is wrong on multiple fronts.

First, it is not accurate that additional upgrades will not be needed until 2024. The ZGlobal report relied upon by the DEIR/DEIS shows significant reliability violations in the 2019 "Cluster 7" scenario, which includes projects that will rely on the WOD Upgrade Project to achieve full deliverability. In other words, the Phased Build Alternative does not even fully meet the deliverability needs of projects slated to come online at the time the Proposed Project becomes operational, let alone meet the needs of subsequent future projects. For an additional critique of this assumption, see Section III.C.

Second, even assuming the DEIR/DEIS is correct that additional upgrades are not needed until 2024, the Phased Build Alternative fails to account for the fact that, as proposed, the first phase of this alternative would not be operational until the end of 2022 at the earliest, a *mere 2 years* before a "future" need date for a second phase beginning sometime in 2024. Because it can take years to prepare an application and obtain final approval from the CPUC and BLM,[25] SCE would be forced to submit an application for upgrades needed in 2024 while the project is under construction. See Section V, below, for more discussion of the risks of regulatory delays.

In short, the Phased Build Alternative would force a "do loop" of environmental review by segmenting the analysis into two or more separate environmental review cycles instead of a single document, which is not permitted by CEQA or NEPA. The DEIR/DEIS's approach of relying on a second phase to handle the reasonably foreseeable system need as a way to justify not building the entire project now, but then ignoring the second phase for purposes of environmental review is not only internally inconsistent, it is impermissible under CEQA and NEPA. While some future

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23 DEIRDEIR/DEIS, p. C-25. "Future phases" could include: "Reconductor the newly constructed 220 kV structures with higher capacity conductors; Replace the retained 220 kV structures with new, stronger 220 kV structures in order to carry heavier, higher capacity conductors; Install a single- or double-circuit 500 kV or 220 kV line in the vacant space remaining in the ROW." *Id.*

24 *Id.*

25 CPUC staff has indicated that it can take four to nine years to prepare the application, permit and construct a new transmission line. *See* CPUC, "Processes for Planning and Permitting Electric Transmission Projects in California," (Oct. 2011), available at http://www.cpuc.ca.gov/NR/rdonlyres/6D4D8AA9-CF49-4194-A4C6-DF394317EA6B/0/CPUCSidesFresnoAssmblyComTransmissionOct242011.pdf, Slide 7.

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upgrades may not be well enough defined to be fully analyzed (e.g., the possibility of a new 500 kV line), it is *simply not correct* that no upgrades beyond the bare minimum needed to meet the initial phase are reasonably foreseeable. Therefore, to comply with CEQA and NEPA, the evaluation of the Phased Build Alternative must, at a minimum, be revised to address not just Basic Project Objective 1, but all reasonably foreseeable upgrades needed to meet system deliverability requests. **F1-13 cont.**

B. Phased Build Alternative Would Result In *Greater Environmental Impacts* Than The Proposed Project **F1-14**

The segmented approach of the Phased Build Alternative actually results in *greater environmental impacts* than the Proposed Project because it does not meet the system need. As such, it will force an additional project in the near-term to then meet the system need, thereby requiring multiple rounds of construction activities, possibly in short succession, prolonging the duration of noise and air pollutant exposure, while increasing land disturbance and associated impacts. In addition, the Phased Build Alternative requires additional construction impacts that are not required to construct SCE's Proposed Project.

1. The Phased Build Alternative Would Cause Additional Impacts Necessary for Wire-Stringing Operations

The DEIR/DEIS erroneously concluded that the environmental impact of the Phased Build Alternative will be less than those associated with SCE's Proposed Project. The assumption that the re-use of existing 220 kV double circuit structures for use with 795 ACCR would be less impactful than replacement of the 220 kV structures for use with 1590 ACSR fails to take into account numerous construction and other negative environmental impacts that will be caused by the Phased Build Alternative. It is clear that this assumption was made in the DEIR/DEIS without completing a full analysis of all that would be required in order to reuse towers with the 795 ACCR conductor, as well as the numerous feasibility issues associated with construction.

As discussed above, the Phased Build Alternative will require SCE to expand currently planned wire sites and to add new sites. While SCE has not completed its full analysis of all the additional wire sites that would be necessary, initial review has identified a significant number of additional wire sites would be required to construct the Phase Build Alternative. These additional wire sites would cause added disturbance and environmental impact that is not anticipated by the construction of the Proposed Project. In addition, due to the wire-stringing bending constraints of the 795 ACCR conductor, the wire-stringing sites planned for SCE's Proposed Project would need to be expanded to reduce the break-over angle. Expansion of these sites, where feasible, would result in additional disturbance area, a significant expansion of civil upgrades, and the potential for impacting sensitive species. The additional sites, as well as the expansion of sites, would significantly increase the overall project disturbance area and would result in additional noise, dust, visual, and other resource area impacts, as explained in the comment table.

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2. The Phased Build Alternative Results in Towers That Will Not Be Aligned Which Can Lead to Conductor Blow-out And Increased Visual Impacts

F1-15

Re-use of existing structures and construction of new structures, as called for in the Phased Build Alternative, will result in structures that will not line up in the ROW next to each other. In contrast, the Proposed Project pairs the new set of structures adjacent to each other (to the extent feasible) in order to minimize the visual impact of the structures and to achieve matched spacing between structures and lengths of conductor (commonly referred to as "spans"). Although the design of the Phased Build Alternative leads to additional visual impacts as compared to the Proposed Project, the DEIR/DEIS does not contain any visual simulations of the Phased Build Alternative, and as such, the public has not been provided with the opportunity to review and comment. This is a serious concern, as the Phased Build Alternative would result in towers that are not aligned and most likely more structures in the West of Devers corridor than the Proposed Project. In addition, the difference in conductor spans between the two adjacent lines could also create the potential for conductor contact between circuits and/or structures due to conductor sway during windy conditions (technically referred to "blow-out").

In order to eliminate the potential blow-out impact resulting from new and existing structures that are offset and do not have similar conductor spans, SCE would need to add additional structures on both the existing and new tower lines. Moreover, it may not be feasible to locate adequate additional structures to mitigate the impact of offset structures and mismatched conductor spans. Assuming additional structures could be installed, this scope of work would significantly increase the overall project disturbance area and would result in additional noise, dust, visual, and other resource area impacts as explained in the comment table. The impact of these additional structures were not even considered – much less, fully analyzed – in the DEIR/DEIS.

V. THE PHASED BUILD ALTERNATIVE IS NOT COST-EFFECTIVE AND WOULD DELAY THE PROJECT'S IN-SERVICE DATE

F1-16

Based only on conceptual and speculative information, the DEIR/DEIS asserts that the Phased Build Alternative would have a reduced construction timeframe and would cost less than SCE's detailed, fully-planned Proposed Project. This analysis incorrectly dismisses the overall delay the Phased Build Alternative would cause to the project's in-service date and understates the necessary project scope elements, additional design and engineering work, new procurement and testing efforts and construction requirements in order to actually build the Phased Build Alternative.[26] SCE has not had sufficient time to develop a cost estimate for the Phased Build Alternative and cannot say with certainty that the cost to construct the Phased Build Alternative would be more or less than the cost to construct SCE's Proposed Project. SCE will continue to work through the missing scope elements to better understand the impact to the construction cost.

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[26] The DEIR/DEIS also ignores several SCE responses to Energy Division data requests in which SCE explained how alternatives that either reuse a portion of the existing double circuit 220 kV structures or move any new 220 kV structures closer to the center of the ROW would create many construction challenges and result in an overall delay to the project of at least 12 to 24 months. See, for example, SCE's responses to Data Request Numbers ALT-14, ALT-15A, ALT-15B, ALT-15C, ALT-17A, and ALT-17B.

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Beyond the missing and understated scope elements for the Phased Build Alternative, the DEIR/DEIS cost assertion is flawed because it erroneously compares the cost-effectiveness of SCE's Proposed Project (with full capacity) against the much lesser capacity of the Phased Build Alternative, without taking into account the cost of the necessary next phase of the latter project needed to get the equivalent capacity, in order to make an "apples to apples" comparison. A simply analogy makes this clear: if we need to build a two story building, but decide today to build just the first story and then build the second story two years later, it is inaccurate to compare the cost of building just the first story to what it would cost to build both stories at one time—the valid analysis must compare the cost of a two-story building built over two years to the equivalent two-story building built all at once. It is hard to foresee a situation where the two-phased build out results in a lower cost than the Proposed Project, and SCE will evaluate this in more detail as it prepares for testimony in the case-in-chief. For these reasons, and as described in more detail below, the Phased Build Alternative is not cost-effective and would take longer to complete as compared to SCE's Proposed Project. **F1-16 cont.**

The DEIR/DEIS failed to accurately account for electrical and construction limitations associated with the Phased Build Alternative's 795 ACCR conductor. These limitations increase the scope of the project, thereby increasing the schedule and the costs. First, based on the electrical limitations, and as recognized by the study prepared by ZGlobal, a Special Protection System and 600 MVar of shunt capacitance would be needed for this project. Both of these elements are unaccounted for in the Phased Build Alternative's conceptual scope and would result in additional time and costs. Second, there are a multitude of construction requirements that are necessary for the Phased Build Alternative which were either not addressed or were understated in the DEIR/DEIS: **F1-17**

- the need for interset structures to mitigate the potential of conductor sway or blow-out associated with mismatched conductor spans;
- the need for additional temporary structures and wire to minimize the need for line outages;
- the addition of new and expansion of proposed wire sites;
- the need for additional mobilization and demobilization of construction crews and additional environmental monitoring made necessary by more difficult outage requirements.

These added construction requirements would necessitate additional costs and would also cause delays to the project schedule, resulting in additional project management and project support costs.

SCE sought further information from the Energy Division regarding the schedule and cost assumptions included in the DEIR/DEIS, and the Energy Division was only able to provide limited information. Notwithstanding the assumptions that were not provided, the Energy Division did include a few assumptions that must be addressed. The Energy Division's response correctly assumes that there would be a reduction in labor costs associated with removing fewer of the existing 220 kV structures, as well as labor and material cost savings associated with constructing fewer new 220 kV structures. The Energy Division's response also correctly assumes that the 795 ACCR conductor is significantly more costly than the Proposed Project's conductor (double-bundle 1590 ACSR conductor), however, it fails to calculate the impact of the difference. Based on limited research, the 795 ACCR conductor seems to be approximately 4-5 times as costly as 1590 ACSR conductor. Taking into account the assumption that the Phased Build Alternative would require **F1-18**

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approximately 45% less conductor (single vs. double-bundle), the conductor costs for the Phased Build Alternative would still be significantly more than that for the Proposed Project. **F1-18 cont.**

The Energy Division's response, then, implausibly asserts that the labor cost for conductor installation would be 35 to 40% less than conductor installation for the Proposed Project, based on the assumption that installing a single conductor takes less time to install than a double-bundle conductor. This conclusion is flawed, as the construction limitations associated with a more limited bending angle for the 795 ACCR conductor would actually increase the labor cost for installing this conductor. Furthermore, pulling single conductor has no real labor savings as compared to double-bundle conductor because the "double-bundle" is pulled together, not separately, and single conductor cannot be pulled faster.

In addition to the increased labor cost to install the 795 ACCR conductor, there would be additional costs associated with the wire-pulling equipment that would be needed, as well as potentially increased costs for the line hardware materials used to attach the conductors to the transmission structures. These costs do not appear to be reflected in the Energy Division's assumptions.

Lastly, the Energy Division's response asserts there would be a cost savings from eliminating the need for the subtransmission scope, as the Phased Build Alternative assumes that there would be sufficient space to pull the new conductor through Segment 1 without relocating the subtransmission lines.[27] Therefore, this presumed savings may not actually be realized.

The DEIR/DEIS correctly recognizes that the 795 ACCR conductor has higher electrical losses when compared to the electrical losses of the Proposed Project conductor. In this same general discussion, the DEIR/DEIS asserts that electrical losses have an economic consequence, but those consequences do not appear to be accounted for in asserting that the Phased Build Alternative would be less costly than SCE's Proposed Project. SCE has started to analyze the cost of electrical losses. Early indications suggest that these electrical losses are not trivial and could reach into several millions of dollars per year more for the Phased Build Alternative than for the Proposed Project. **F1-19**

As explained in SCE's responses to data requests, the Phased Build Alternative would require additional design and engineering work, additional conductor procurement and testing, and cause construction delays that would extend the overall project in-service date by approximately two years. This delay would increase the costs of the Phased Build Alternative associated with extended project management, project support and environmental compliance. Additional costs could also be identified after the necessary design and engineering is completed, in order to get to an equivalent engineering level and scope definition as the Proposed Project. If the necessary engineering and scope definition is not completed until after the Commission's decision is issued and the Phased Build Alternative is subsequently found to be infeasible or requiring further environmental review, SCE would have to re-open the CPCN process through a petition for modification to request the changes needed to make it constructible and/or environmentally- **F1-20**

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[27] SCE's Proposed Project called for the removal and relocation of two miles of 66 kV subtransmission lines to make space in the West of Devers corridor for the upgraded and relocated 220 kV transmission lines.

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compliant. This could add up to an additional 12 months of delay further impacting cost and schedule. F1-20 cont.

The flaw in the assertion that the Phased Build Alternative is less costly than the Proposed Project is most apparent in the failure to conduct a comparable cost-effectiveness analysis, taking into account costs and differences in capacity. In comparing economic projects or even policy-driven projects, it is standard to develop a cost-effectiveness analysis that includes capacity. In this case, the use of double-bundle 1590 ACSR conductor provides substantially more capacity compared to the 795 ACCR conductor. Based on this simplifying fact, and not factoring into account other project-driven costs such as the cost of electrical losses, the construction cost of the Phased Build Alternative would need to be substantially less than the construction cost of the Proposed Project in order to conclude that the Phased Build Alternative is less costly than the Proposed Project. SCE asserts that based on its high-level understanding of the scope of the Phased Build Alternative, this is not the case.

The phased-approach of the Phased Build Alternative would result in greater overall costs, impacts, and risks. A phased-approach is less efficient than the single, coordinated construction effort contemplated by the Proposed Project, as it would result in duplicating many activities, which exacerbates the environmental impacts and overall costs. Examples include repeating environmental studies, engineering studies, licensing activities, and having to effectively construct twice. A phased-approach also interjects additional risks that can be significant. A lower transfer capability would limit the network's ability to meet deliverability requirements of generators, increase system constraints, and cause other potential system problems, all of which could result in even greater costs to ratepayers.

For all of the reasons stated above, the DEIR/DEIR should state that although the Phased Build Alternative would result in some schedule and cost reductions associated with removing and installing fewer 220 kV structures, the Phased Build Alternative does not meet SCE's Project Objectives #4 and #6 because it would delay the project's in-service date and would not be as cost-effective as the SCE's Proposed Project, due to other scope elements of the Phased Build Alternative, a much smaller increase in transfer capability, and the fact that the next phase would result in another round of design, engineering, licensing, construction and environmental costs and impacts.

VI. THE REQUIREMENT TO OBTAIN A VARIANCE FROM LOCAL JURISDICTIONS FOR NOISE IMPACTS SHOULD BE STRICKEN OR REVISED F1-21

The DEIR/DEIS concludes that the Proposed Project will result in a significant and unavoidable impact from construction noise (Impact N-1). Mitigation Measures N-1a and N-1b would reduce the impact, but it would remain significant and unavoidable.

SCE requests clarification of additional language in the DEIR/DEIS regarding local agency variances for certain construction activities. Specifically, the DEIR/DEIS states:

> With implementation of the recommended mitigation measures, the construction activities would either comply with local noise

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> ordinances, *or SCE would request a variance from each affected jurisdiction. SCE would similarly request a variance if there is a need to work outside of normal daytime, weekday hours*.[28]

F1-21 cont.

Similarly, Mitigation Measure N-1a provides in pertinent part:

> Construction noise shall be confined to daytime, weekday hours (7:00 a.m. to 6:00 p.m.) *or an alternative schedule established by the local jurisdiction*.[29]

The CPUC has made clear that regulated public utilities are not required to obtain local agency discretionary approvals related to the construction of major transmission lines such as the Proposed Project, including local noise variances. For example, in the CEQA Findings of Fact for Tehachapi Renewable Transmission Project, the CPUC reiterated this determination:

> "the CPUC has preemptive authority over local jurisdictions with regard to the regulation of electrical power lines and electric facilities constructed by public utilities. (See CPUC General Order 131-D.) Therefore, the Project and other **projects subject to the CPUC's jurisdiction are not required to obtain approvals from local agencies, including variances from local noise ordinances**."[30]

This well-established authority is grounded in the California Constitution, the Public Utilities Code, and General Order 131-D.[31]

Further, CEQA does not require a local agency noise variance to address Impact N-1 for at least three reasons. First, CEQA requires mitigation measures to reduce significant environmental impacts, but a noise variance does not reduce or eliminate a significant environmental impact. Instead, a variance allows legal non-compliance of otherwise applicable noise standards in certain circumstances. Although the Proposed Project will likely result in construction activities that exceed some local noise standards, this is typical for major infrastructure projects, including, but not limited to, transmission line projects. In many cases, after-hours or extended construction *reduces* disturbances by minimizing the impact on local traffic and the public. Limiting construction

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28 DEIR, p. D.13-17 (emphasis added).

29 DEIR, p. D.13-18 (emphasis added).

30 TRTP Findings of Fact, p. 290 (emphasis added).

31 The California Constitution, Article XII, Section 8, states, a "city, county, or other public body may not regulate matters over which the Legislature grants regulatory power to the [Public Utilities] Commission...." Public Utilities Code Section 701 states, "[t]he Commission may supervise and regulate every public utility in the State and may do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction." Further, General Order 131-D "clarifies 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." General Order 131-D, Section XIV(B).

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activities to regular hours could ultimately increase environmental impacts overall by increasing disruptions and delaying other aspects of the project. F1-21 cont.

Second, if SCE is unable to obtain a local noise variance within a reasonable period of time despite SCE's best efforts, then the mitigation is considered "infeasible" for purposes of CEQA, as defined above. CEQA disallows the imposition of infeasible mitigation. Recent history demonstrates that, in some circumstances, it has been not been feasible to obtain local noise variances within a reasonable period of time, even after using best efforts.

Third, the purpose of any such variance request is to ensure appropriate standards are put in place to minimize noise disturbances to sensitive receptors while allowing construction activities to proceed based on the project schedule. To the extent that a noise variance request is included in the EIR/EIS, this purpose can be satisfied by either receiving an approval from the affected local agency or, if the local agency declines to act on a request in a reasonable period of time, then by the CPUC staff. In either instance, SCE would not proceed with the applicable construction activities until authorized.

For these reasons, SCE prefers having the variance language stricken from the EIR/EIS. If the language is not removed, SCE proposes revised language in the body of its comments to address this issue, which, at a minimum, should be incorporated into the EIR/EIS.

VII. THE VISUAL RESOURCES ANALYSIS IS FLAWED AND NOT CONSISTENT WITH CEQA F1-22

The DEIR/DEIS analysis of Visual Resources identifies significant impacts during construction and imposes mitigation measures that are fundamentally flawed and not consistent with CEQA.

A. For Construction Activities, Sweeping Mitigation Would Require Staff to Re-Analyze The Project Post-Approval, Resulting In An Unknown Number Of Design Changes Even Though Information Is Available Now To Include The Analysis In The EIR/EIS

For construction activities (Impact VR-4), the DEIR/DEIS concludes that, within Segments 2, 3, 4 and 6, construction of the Proposed Project on hilltops and hillsides may create views of newly graded terrain, which constitutes a potentially significant impact. To mitigate this impact, Mitigation Measure VR-4a requires SCE to submit a "map book and description of **all** access and spur roads, retaining walls, and ground disturbance areas within Segments 2, 3, 4, and 6" (emphasis added), which will be analyzed by the CPUC's Visual Specialist "to assess in-line visibility of these Proposed Project features" from undefined "sensitive viewing locations." Based on this post-approval analysis, SCE may be required to redesign the project to address findings and recommendations from the CPUC and BLM visual specialists.

In essence, Mitigation Measures VR-4a creates a process whereby, *after* the EIR/EIS is approved, staff will *re-analyze* every spur road, retaining wall, and ground disturbance area within Segments 2, 3, 4 and 6 resulting in an unknown number of project design changes even though the information is already available and could be included in the EIR/EIS. These design changes may raise new environmental or engineering constraints, which could lead to further delays and

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uncertainty. These concerns are even further magnified when the process created by Mitigation Measure VR-4 is applied to the Phased Build Alternative, as there has only been minimal engineering conducted on the Phased Build Alternative to-date, in contrast to the extensive, detailed engineering that SCE has already completed for the Proposed Project. This mitigation strategy is fundamentally flawed and not allowed under CEQA. **F1-22 cont.**

First, CEQA requires an EIR to evaluate and conclude whether specific activities are significant, not simply reach generalized findings. An EIR cannot merely label an impact significant without first providing a detailed discussion and analysis supporting the specific impact conclusion.

Between the PEA and SCE's responses to data requests, there is ample information about the Proposed Project's ground disturbance, retaining walls and spur roads to determine which specific construction activities and locations may cause significant impacts to visual resources. In other words, the EIR/EIS must identify *which specific* spur roads, retaining walls or grading areas will result in a potentially significant impact and not simply conclude that such activities could generically cause potentially significant impacts across the entirety of Segments 2, 3, 4 and 6.

Evidence indicates that there are few, if any, areas within Segments 2, 3, 4 and 6 where construction ground disturbance, retaining walls and spur roads will result in a potentially significant visual impacts requiring mitigation. Almost all construction activities will occur in previously disturbed areas or established right-of-way with existing transmission line infrastructure, substantially reducing the potential for significant visual impacts.

Second, Mitigation Measure VR-4a improperly defers analysis of impacts to a post-approval stage. The mere fact that there *may* be some locations with potentially significant impacts within Segments 2, 3, 4 and 6 does not justify a post-approval analysis for the entirety of Segments 2, 3, 4 and 6. CEQA generally disallows deferring analysis unless it is not practical to do so in the EIR. In cases where mitigation measures include future analysis, the mitigation measure must identify specific performance standards by which the analysis will be applied. CEQA prohibits mitigation measures that simply require a developer to comply with any recommendations in a future analysis. **F1-23**

While some impact determinations require post-approval analysis, that is *not* the case here. SCE has already submitted the large majority of information contemplated by Mitigation Measure VR-4a. This means the analysis can be completed in the EIR/EIS, which is what CEQA and NEPA intend. To the extent that some additional analysis is required, it should be limited to specific locations where: (1) the EIR identifies a potentially significant impact, not the entirety of the Segment 2, 3, 4 and 6; <u>and</u> (2) the final design is materially different from the design that SCE has already provided.

Third, to the extent that SCE must incorporate additional design features to mitigate potentially significant impacts from ground disturbance, retaining walls or spur roads, the options should be clearly identified in Mitigation Measure VR-4a. Additionally, these options should explain the potential schedule and cost impacts to allow the Commission and the public to have a full understanding of the proposed mitigation. Accordingly, Mitigation Measure VR-4a should identify the design measures that SCE can apply prior to final design to ensure visual impacts are

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reduced to less than significant levels. Post-approval evaluation by the CPUC's Visual Specialist can then be limited to determining whether SCE has applied the appropriate measures. F1-23 cont.

SCE has respectfully proposed removal of Mitigation Measure VR-4a to address this comment.

B. For Operational Impacts, the DEIR/DEIS Applies Onerous Mitigation Across the Entire Project Even Though Only A Select Few Locations Result in Significant Visual Impacts F1-24

For operational visual impacts, the DEIR/DEIS identifies four discrete locations where there will be significant visual impacts. For the large majority of the project's 48 corridor miles, impacts as a result of SCE's Proposed Project will be either beneficial or less than significant. Nevertheless, the DEIR/DEIS imposes onerous mitigation measures across the entirety of the project.

Under CEQA, mitigation can only be required to reduce significant impacts, and where mitigation is applied, it must be limited in scope by having an "essential nexus" to the nature of the impact and be "roughly proportional" to the scale of the impacts of the project.

In contrast to the clear limits imposed by CEQA, the DEIR/DEIS applies Mitigation Measures VR-8a and VR-9a across the entirety of the project, not just the locations where a significant visual impact would occur. The DEIR recommends that Measures VR-8a and VR-9a apply to sections with a less than significant impact to "further reduce the adverse visual effects," and to sections with beneficial impacts to "further ensure that the resulting impacts are an improvement and are, in fact, beneficial."

Simply put, this approach is not consistent with CEQA. Mitigation measures should only be applied to reduce significant environmental impacts, not to "further reduce" less than significant impacts or to ensure that beneficial impacts occur. As proposed, Mitigation Measures VR-8a and VR-9a would impose substantial costs and effort on SCE that are not connected to or roughly proportional to the limited nature of the impact.

As discussed in the PEA, SCE will reduce visual impacts across the entirety of the project by applying design features intended to reduce visual effects, including revegetation, recontouring, use of appropriate materials, light shielding, and glare reduction as appropriate. However, except for the limited locations identified in the DEIR/DEIS where significant visual impacts will occur, no additional mitigation is permitted under CEQA. As such, SCE respectfully proposes removal of Mitigation Measures VR-8a and VR-9a.

VIII. SOLAR PROJECTS ARE NOT "CONNECTED ACTIONS" UNDER NEPA AND ARE MORE APPROPRIATELY ANALYZED AS CUMULATIVE IMPACTS F1-25

The DEIR/DEIS identifies seven solar generation projects ("Solar Generation Projects") as "connected actions." Under NEPA, actions are connected if they: "(i) automatically trigger other actions which may require environmental impact statements; (ii) cannot or will not proceed unless other actions are taken previously or simultaneously; (iii) are interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1).

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It is well settled law that the Ninth Circuit applies "an 'independent utility' test to determine whether multiple actions are so connected as to mandate consideration in a single EIS." *Cal. ex rel. Imperial Cnty. Air Pollution Control Dist. v. U.S. Dept. of the Interior*, 767 F. 3d 781, 795 (9th Cir. 2014) (quoting *Great Basin Mine Watch v. Hankins*, 456 F. 3d 955, 969 (9th Cir. 2006) (quoting *Wetland Actions Network v. U.S. Army Corps of Eng'rs,* 222 F. 3d 1105, 1118 (9th Cir. 2000)). **F1-25 cont.**

Independent utility is established "when one of the projects might reasonably have been completed without the existence of the other, the two projects have independent utility and are not 'connected' for NEPA's purposes.'" *Sierra Club v. Bureau of Land Mgmt.*, No. 13-15383, 2015 U.S. App. LEXIS 8728 (9th Cir. May 27, 2015) (citing *Pac. Coast Fed. of Fishermen's Ass'ns v. Blank*, 693 F.3d 1084, 1098 (9th Cir. 2012) (citing *Great Basin Mine Watch v. Hankins*, 456 F. 3d 955, 969 (9th Cir. 2000)).

Multiple actions can have independent utility even if they have "overlapping, but not co-extensive, goals." *Pac. Coast Fed. of Fishermen's Ass'ns*, 693 F.3d at 1098-1099 ("While it is true the record is replete with statements about how Amendments 20 and 21 are linked, two actions are not connected simply because they benefit each other or the environment.) This point was squarely addressed by the Ninth Circuit in *Sylvester v. U.S. Army Corps of Eng'rs,* 884 F. 2d 394 (9th Cir. 1989), where a developer proposed a resort in Squaw Valley, California, which included skiing facilities, a resort village, and a golf course. The golf course was to be located on a meadow, while the resort and ski runs were to be situated on neighboring uplands. The meadows contained pockets of wetlands, which triggered NEPA review of the proposed plan by the Army Corps of Engineers. In its evaluation of the Proposed Project, the Army Corps considered only the impacts of the golf course, and not the impacts of the rest of the resort complex, because it viewed its jurisdiction to extend only to the meadows containing the wetlands. A third party challenged the Army Corps' decision, asserting that the Army Corps improperly limited the scope of its NEPA analysis to the golf course rather than reviewing the environmental impact of the entire proposed resort. The district court granted the third-party's request for a preliminary injunction enjoining the construction of the proposed golf course.

The Ninth Circuit reversed. While acknowledging that federal agencies cannot divide projects to avoid meaningful NEPA review, the Ninth Circuit held that the Army Corps' decision to limit its review to only the wetlands was proper because "each could exist without the other, although each would benefit from the other's presence." *Id.*, at 400.

Applied here, West of Devers and the Solar Generation Projects are not connected actions because "one of the projects might reasonably have been completed without the existence of the other," meaning "the two projects have independent utility and are not 'connected' for NEPA's purposes." *See Sierra Club v. Bureau of Land Mgmt.*, No. 13-15383, 2015 U.S. App. LEXIS 8728 (9th Cir. May 27, 2015).

Even though SCE proposed the WOD Upgrade Project in part to satisfy the full deliverability requests of certain generators, including the Solar Generation Projects, SCE identified independent purposes for the project. Specifically, other independent purposes of West of Devers include:

- Support California's greenhouse gas reduction program;

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F1-25 cont.

- Support federal renewable energy goals;
- Support goals of the California Energy CPUC Integrated Energy Policy Report; and
- Support the Desert Renewable Energy Conservation Plan.

By supporting these other objectives, the WOD Upgrade Project has utility that is independent of the objective to interconnect the Solar Generation Projects. As such, the WOD Upgrade Project has independent utility from the Solar Generation Projects. Similarly, the Solar Generation Projects have independent utility separate from the WOD Upgrade Project, such as facilitating the goals of the DRECP and meeting state and federal renewable energy goals.

In contrast, the DEIR/DEIS does not properly apply the independent utility test. The DEIR/DEIS concludes the Solar Generation Projects are connected actions because the WOD Upgrade Project is needed to ensure the full deliverability of these projects. SCE does not dispute this fact. However, even though the Solar Generation Projects need the WOD Upgrade Project for full deliverability, the projects are not connected actions under NEPA because the WOD Upgrade Project has independent utility. As the Ninth Circuit held in *Sylvester*, two projects can have independent utility even if each project benefits the other.

A conclusion of independent utility is supported by the fact that the WOD Upgrade Project and the Solar Generation Projects will each undergo separate and complete environmental review. The Ninth Circuit has emphasized that the purpose behind the connected actions requirement is to ensure that environmental review is not avoided by segmentation. *See Pac. Coast Fed. of Fishermen's Ass'ns*, 693 F.3d at 1099 ("Perhaps more important than parsing NMFS's words or predicting whether it would adopt one Amendment without the other is answering the question whether, in preparing separate EISs, NMFS evaded its duty to fully study the combined effects of Amendments 20 and 21. This is the real concern behind [40 C.F.R.] § 1508.25.")

With the Solar Generation Projects, as in *Pac. Coast Fed.*, "This 'divide and conquer' concern is not present here." *Id.* The Solar Generation Projects will each undergo full environmental review under CEQA and/or NEPA, as appropriate. In addition, the Solar Generation Projects will be analyzed as cumulative impacts even if not considered connected actions, ensuring that environmental effects are not being ignored. *See,* 179 Interior Board of Land Appeals (IBLA) 148, 173 (2010) ("[Plaintiff] offers no argument or evidence that any cumulative impact is likely to be ignored or overlooked were the [transmission] line and any of the identified wind farm projects to be considered separately.")

Instead of being connected actions, the Solar Generation Projects are more properly analyzed as cumulative impacts. CEQA requires an EIR to evaluate cumulative impacts of a project, which are defined as two or more individual effects which, when considered together, are considerable or compound or increase other environmental impacts. CEQA Guidelines § 15355. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." CEQA Guidelines § 15355(b).

NEPA also requires consideration of cumulative effects, defined as "the impact on the

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environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. While courts have held that "reasonably foreseeable" actions do not include "highly speculative" harms, they do include impacts "'sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.'" *City of Shoreacres v. Waterworth*, 420 F.3d 440, 453 (5th Cir. 2005). **F1-25 cont.**

Here, because the Solar Generation Projects are reasonable foreseeable future projects related to West of Devers, but not connected actions, they should be considered in the cumulative impacts analysis of the DEIR/DEIS.

IX. CONCLUSION

F1-26

SCE has identified multiple issues associated with the Phased Build Alternative and certain of the mitigation measures proposed in the DEIR/DEIS. From the information presented in this letter and the associated attachments, the Phased Build Alternative is not the Environmentally Superior Alternative and must be discarded in the FEIR/FEIS as a project alternative, or, at a minimum, the FEIR/FEIS should identify its serious feasibility constraints and increased environmental impacts compared to the Proposed Project. The Phased Build Alternative's failure to meet most of the basic project objectives, its greater environmental impacts, and the feasibility issues identified herein demonstrate that it is not an environmentally superior alternative to the Proposed Project and therefore should be rejected.

Very truly yours,

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Responses to Comment Set F1 – Southern California Edison (Cover Letter)

F1-1 These introductory comments from SCE claim that the Phased Build Alternative is "an entirely new alternative based on an untested and flawed analysis" of system needs and that the analysis cannot be relied upon for transmission planning purposes. Each of these comments is addressed in General Responses GR-1 (Project Need) and GR-2 (Agency-defined Basic Project Objectives), as well as individual responses below (including F1-5 to F1-9). These responses address the general requirements of CEQA to describe a reasonable range of alternatives, which, in this case, includes the Phased Build Alternative.

Additional individual responses (including Responses to Comments F1-10 through F1-15) address the conclusion made in the Draft EIR/EIS that the Phased Build Alternative is "potentially feasible" and eligible for consideration within an EIR. These responses also demonstrate that the alternative is considered to be feasible and likely to have environmental advantages that allow it to be designated as environmentally superior to the Proposed Project. See also General Response GR-3 on how renewable energy projects would be accommodated.

F1-2 The commenter notes that CPUC's authority over transmission construction preempts local ordinances. SCE clarifies that it did not propose to request variances for work outside of certain hours, alleging that in some unspecified instances local agencies have declined to grant variance requests in a reasonable period of time.

Section D.13.3.3 (Noise, Impacts and Mitigation Measures), under the heading Construction Noise Compliance with Local Ordinances, the EIR text has been modified to clarify the intent of the discussion. SCE, in its PEA, commits to coordination with local agencies to minimize conflicts with applicable ordinances. SCE's commitment in its PEA and the noise mitigation measure documented in the EIR recognize the importance of consulting with, and fully informing, local jurisdictions before undertaking sensitive activities such as night construction work. The text of the EIR no longer references the need for a variance, but it references the important coordination to which SCE has committed. In the Draft EIR/EIS, Mitigation Measure N-1a (Implement best management practices for construction noise) did not require a variance to be obtained; it simply required compliance with the schedule developed in SCE's coordination with local jurisdictions. The mitigation language has been modified to clarify this process. The noise mitigation measure, ensures that SCE's commitment will be followed and that compliance with the results of SCE's coordination will be monitored.

F1-3 The commenter asserts that mitigation for less-than-significant construction impacts presented in Section D.18.3.3 (Impacts and Mitigation Measures) is not consistent with CEQA because mitigation can only be required for significant impacts. However, the Draft EIR/EIS was a joint CEQA/NEPA document. NEPA requires the application of feasible mitigation even if an impact is less than significant.

The commenter also asserts that the mitigation measures for construction impacts require an onerous post-EIR applicability determination that is unnecessary because sufficient information is available now for such a determination.

The EIR is prepared based on SCE's preliminary engineering and project design plans. The preliminary nature of the project design is highlighted in SCE's comment on Draft EIR/EIS (Comment F3-67, page B-27 of SCE's Attachment B). In this comment, SCE does not contro-

vert the Draft EIR/EIS text that states retaining walls may be required along some access roads and that retaining wall locations are preliminary. As pointed out in the EIR text cited by SCE, the specific number of retaining wall structures and locations would be identified during final engineering and could range between 2 and 18 feet in exposed height. Furthermore, In all but two cases (views from San Gorgonio Memorial Park and Cemetery and views from the Pacific Crest Trail near the Whitewater residential community), the structure installation/removal impact areas would typically be visible from numerous residences and/or multiple or major roadways. Consequently, the EIR imposes Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance, and limit ground disturbance in Segments 2, 3, and 6), VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces), and VR-4a (Minimize in-line views of retaining walls and land scars) to address these visual impacts.

SCE did disclose in its comment, however, that additional engineering analysis, conducted since preparation of the Draft EIR/EIS, has reduced the linear feet estimates for retaining walls down from approximately 4,010 linear feet to approximately 3,168 linear feet with revisions occurring in Segments 2 through 6. Based on the additional engineering that SCE has provided, the EIR team has narrowed the locations where Mitigation Measures VR-2a, VR-3a, and VR-4a would apply. However, even with this additional analysis, it is still clear that there will still be some visual impacts at specific locations where Mitigation Measures VR-2a, VR-3a, and VR-4a would be applied. A field assessment was conducted in response to this comment and the results are presented in a new table in Section D.18.3.3: Table D.18-11 (Structure locations subject to Mitigation Measures VR-2a, VR-3a, and VR-4a). The table provides a list of structure locations (proposed, to be modified, and to be removed) that have been identified as subject to these three mitigation measures, based on the high visibility of their respective installation/removal impact areas to residences, roads, recreation facilities, and other public locations. Although the number of structure locations presented in Table D.18-10 has been considerably reduced from the total number of structure locations covered by the blanket application of MMs VR-2a, VR-3a, and VR-4a in the EIR, at least one structure location was identified in each of the six segments. Therefore, the descriptions of Mitigation Measures VR-2a, VR-3a, and VR-4a have been revised in the EIR to include application to all segments. As noted in the new text introduction to Table D.18-11, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation prescribed in MMs VR-2a, VR-3a, and VR-4a would not be necessary.

The CEQA significance determinations presented in Section D.18.3.5 are unaffected by this additional information; the impact significance remains as stated in that discussion for those locations that will be visible to residences, roads, recreation facilities, and other public locations. It is simply that the number of specific locations where each visual impact could occur has been reduced.

F1-4 The commenter suggests that the solar generation projects that will utilize the Project to deliver renewable energy to the grid should have been evaluated as “cumulative projects” in the Draft EIR/EIS, rather than as “connected actions.” Under CEQA, these projects are considered part of the “whole of the action” because the “connected” projects are enabled by the completion of the Proposed Project.

The National Environmental Policy Act (“NEPA”) defines “connected actions” as actions that: “(i) automatically trigger other actions which may require environmental impact statements.

(ii) cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) are interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25 (a)(1).

The independent utility test applied by the Ninth Circuit Court of Appeals to determine whether a proposed project and another action are connected actions examines whether the other action would occur in the absence of the proposed project. In other words, "[w]here each of two projects would have taken place with or without the other, each has 'independent utility' and the two are not considered connected actions [under NEPA]." *Native Ecosystems Council v. Dombeck* (9th Cir. 2002) 304 F.3d 886, 894 (emphasis added); *see also, Sierra Club v. Bureau of Land Management* (9th Cir. 2015) 786 F.3d 1219, 1226 ("Rather than adopting a single independent utility test, we have focused on whether *each of two projects* would have taken place with or without the other, and have extended our analysis to each project")*; Great Basin Mine Watch v. Hankins* (9th Cir. 2006) 456 F.3d 955, 969 (explaining that the crux of the independent utility test is whether each of two projects would have taken place with or without the other); *California ex rel. Imperial County Air Pollution Control Dist. v. U.S. Dept. of the Interior* (9th Cir. 2014) 767 F.3d 781, 795 (accord).

Project purpose and need is not a factor of independent utility. Whether a proposed project and another project have similar or divergent goals and objectives is wholly irrelevant to the connected action analysis. The test is whether an action other than the proposed Project will or will not be not be physically completed in the absence of the proposed Project and vice-versa.

Section B.7 (Description of the Project, Connected Actions), details seven renewable solar projects that "…depend on the WOD Upgrade Project in order to move to construction and operation…" *See* Section B.7.1. These renewable solar projects are described in detail in Section B.7.2 and Table B-22 explains why each is considered a connected action to the WOD Upgrade Project. As explained in Table B-22, these solar renewable projects will not be constructed unless the WOD Upgrade is built because each of the renewable projects needs to utilize the upgraded transmission lines of the WOD Upgrade Project to get the energy generated by these projects to market. In fact, executed interconnection agreements for two of the seven projects expressly presume implementation of the WOD Upgrade Project. Thus, as the EIR documents, the seven renewable solar projects will not go forward unless the WOD Upgrade Project is constructed and, therefore they were properly evaluated as connected actions to the WOD Upgrade Project in accordance with NEPA. *Sierra Club v. Bureau of Land Management* (9th Cir. 2015) 786 F.3d 1219, 1226.

F1-5 The comment reviews the objectives set forth by SCE in the PEA and asserts that the CPUC and BLM Basic Project Objectives unnecessarily eliminated and narrowed some of SCE's objectives. The rationale for selecting each of the CPUC and BLM Basic Project Objectives is presented in EIR Section A.2.3. General Response GR-2 also provides a discussion of the agency-specific Basic Project Objectives. Basic Project Objective 1 retains SCE's objective to integrate and fully deliver new generation projects located in the Blythe and Desert Center areas with a modification to specify a minimum level of deliverability to be achieved, at the 2,200 MW level.

The commenter believes that the Draft EIR/EIS improperly narrows and/or eliminates certain of the WOD Upgrade Project applicant's proposed objectives. The commenter also

believes that the Phased Build Alternative does not achieve certain of the WOD Upgrade Project applicant's proposed objectives.

Project Purpose and Need are presented in Section A.2.1 (Introduction, Purposes of the Proposed Project) and SCE's Project Objectives are presented in Section A.2.1.2. As a preliminary matter, it should be noted that the WOD Upgrade Project applicant's proposed objectives #3 (Meet project need while minimizing environmental impacts) and #5 (Comply with applicable Reliability Standards and Regional Business Practice developed by NERC, WECC, and the CAISO) are not appropriate objectives for purposes of the required alternatives analysis. CEQA obligates every project sponsor to construct and operate a proposed project in a manner that minimizes environmental impacts whether minimization of impacts is specifically identified as a project objective or not. Similarly, compliance with applicable transmission reliability and construction standards is presumed, and, therefore is also not an appropriate objective for use in an alternatives analysis.

The commenter states that the EIR inappropriately narrowed or eliminated objectives. Under CEQA, a lead agency has discretion to modify an applicant's proposed project objectives. *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1457. The principles underlying this modification authority are sound. CEQA charges lead agencies with developing a reasonable range of feasible alternatives so that the public and decision-makers can make informed evaluation of the merits of a proposed project as compared to the developed alternatives. *Id.* at 1456-1457; *see also* CEQA Guidelines section 15126.6(a). Reasonable alternatives are those that achieve the most of the **basic** objectives of a proposed project. *See* CEQA Guidelines section 15126.6(a); *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 234 Cal.App.4th 214, 252 Thus, CEQA expressly contemplates situations where a project applicant will provide a lead agency with many objectives that the agency will then distill down to a group of specific, fundamental objectives. *Id.*

EIR Section ES.1.2 (Executive Summary, Proposed Project Purpose and Need) discloses objectives proposed by the WOD Upgrade Project applicant as well as the basic objectives reasonably derived therefrom by the CPUC and BLM from those applicant-proposed objectives in accordance with CEQA.

The commenter also suggests that the Phased Build Alterative does not meet certain objectives. Under CEQA, a feasible and reasonable alternative is one that: (1) attains **most** of the basic project objectives; and (2) avoids or substantially lessens **any** of the significant effects of the project. *See* CEQA Guidelines 15126.6(a) [emphasis added]; *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 234 Cal.App.4th 214, 252. There is simply no requirement under CEQA that an alternative meet every project objective or reduce every impact associated with the project. *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 489.

In accordance with CEQA, the EIR Chapter G (Comparison of Alternatives) and EIR Appendix 5 (Alternatives Screening Report) evaluate a reasonable range of alternatives that meet most of the basic WOD Upgrade Project objectives and avoid or substantially lessen several of the WOD Upgrade Project's significant impacts.

F1-6 The comment asserts that the power flow analysis of the Phased Build Alternative is flawed, by underestimating system needs and by making errors in the alleged capabilities of the

alternative. Please see also the Responses to Comment Set F2, addressing comments in SCE's Attachment A, which address the accuracy of the ZGlobal power flow studies in more detail.

SCE states that various transmission elements such as a remedial action scheme (RAS) and reactive support, of up to 600 MVAR of capacitors, may be needed with the Phased Build Alternative. The implementation of a RAS and additional reactive support features would only be added to the corridor in response to excessive levels of generation, should it be developed. The need for reactive support with capacitor banks at multiple locations is identified for the Phased Build Alternative as necessary in the results of power flow modeling Case #6. This case includes dispatch of generation at a level of deliverability (the Cluster 7, Phase I case) that would be greater than anticipated, plus the import of 1,400 MW from IID. The conclusion for Case #6 shows that the Phased Build Alternative is not technically feasible in this scenario (EIR Appendix 5, Attachment 2, p. 12). Furthermore, adding a RAS would not be a substantial change in operational complexity from the conditions that presently exist in the corridor, which presently operates with a RAS; this is described as part of the No Project / No Action Alternative in EIR, Section C.6.2.1. In contrast with the "system needs" portrayed in the comment, the Phased Build Alternative satisfies the lower level of dispatch in the Reliability Base Case in modeling Case #3 without the need for additional reactive support (EIR Appendix 5, Attachment 2, p. 10).

The comment notes the level of dispatch modeled with the Reliability Base Case in Case #3 of the power flow analysis. The modeling of the 2024 Reliability Base Case has 1,387 MW online at Red Bluff and Colorado River Substations (details in Table A4 of EIR Appendix 5, Attachment 2, p. 21). This level of online power generated is a representation of 3,853 MW of installed renewable resource capacity at these interconnection points accounting for the 36 percent capacity factor of the case. Although the SCE comment disagrees with the level of generation modeled, the comment does not contradict the EIR conclusion that the Phased Build Alternative satisfies the level of generation modeled with the Reliability Base Case in modeling Case #3 (EIR Appendix 5, Attachment 2, p. 10). The power flow analysis of Case #3 also includes the import of 1,400 MW from IID.

The comment notes that the 2013 West of Devers Interim Project presently provides deliverability to 985 MW of installed renewable generation from projects that have Full Capacity Deliverability Status (FCDS) in the baseline conditions. General Response GR-2 notes that the power flow analysis in the EIR does not include a formal study of deliverability. However, in the context of the EIR power flow analysis, as baseline generators, these are included in the various scenarios, including at the level of dispatch modeled with the Reliability Base Case in Case #3. EIR, Section B, Description of the Proposed Project, and the EIR power flow analysis recognize that the 2013 West of Devers Interim Project (EIR Section B.1.1) would be removed as part of the Proposed Project, and accordingly, it is not part of the modeling of the alternative. This topic is also addressed in Response to Comment B9-5 (CAISO comment).

F1-7 The comment claims that the Phased Build Alternative would not meet most of SCE's Project Objectives. The rationale for selecting each of the CPUC and BLM Basic Project Objectives is presented in EIR Section A.2.3, and General Response GR-2 provides a discussion of the agency-specific Basic Project Objectives. These topics are also addressed within Response to Comment F1-5. See also General Response GR-1 on the level of project need, and General

Response GR-3 on renewable energy that would be accommodated by the Phased Build Alternative.

The comment notes that the Phased Build Alternative satisfies "only one" of the EIR power flow analysis cases. Although this is true, the comment does not contradict the EIR conclusion that the Phased Build Alternative satisfies the level of generation modeled with the Reliability Base Case in modeling Case #3 (EIR Appendix 5, Attachment 2, p. 10). Of the seven cases in the power flow analysis, five cases tested the Proposed Project, and two cases (Case #3 and #6) tested the Phased Build Alternative. While the Phased Build Alternative is shown to be not technically feasible in the results of power flow modeling Case #6 (EIR Appendix 5, Attachment 2, p. 12), this higher level of generation is the same as in Case #5. Case #5 and #7 show that the Proposed Project results in overloading the Alberhill-to-Valley 500 kV line under normal operating conditions (EIR Appendix 5, Attachment 2, p.11).

F1-8 The comment claims that the Phased Build Alternative would not meet two of the three Basic Project Objectives, with a focus on Basic Project Objective 1 in this comment. See General Response GR-1 on the level of project need and the scope of the CPUC general proceeding (A.13-10-020) and evidentiary hearing versus the purpose of the EIR, and General Response GR-2 on the ability of the Phased Build Alternative to satisfy Basic Project Objective 1.

The comment also asserts that the EIR power flow analysis is fatally flawed by underestimating system needs, and the power flow analysis should not be relied upon for transmission planning purposes. The power flow analysis in the EIR does not include a formal study of deliverability. Instead, given CEQA requirements for alternatives, the EIR focuses on determining whether the alternatives are feasible. General Response GR-3 includes information on the transmission planning process as it relates to the project-level environmental review.

The comment discusses renewable projects amounting to 1,929 MW of generation resources having executed generator interconnection agreements and incorrectly asserts that the EIR excludes this generation in the consideration of the Phased Build Alternative. All of the individual projects listed in this comment appear in the EIR, Section A.2.1.4, Interconnecting Planned Generation Resources (Table A-4, Projects Contributing to Need for WOD Upgrade Project). All of the individual projects that make up this 1,929 MW and the environmental impacts related to these projects are specifically identified and included as either "connected actions" (EIR Section B.7.1, Table B-22) or Cumulative Projects (EIR Section E.2, Table E-1).

The comment correctly notes that the 2024 Reliability Base Case and power flow analysis Case #3 includes generation producing 1,387 MW at Red Bluff and Colorado River Substations. The comment goes on to incorrectly claim that "only 337 MW of additional new resources" could be developed at the Red Bluff and Colorado River Substations. The comment does not acknowledge how the modeling case with 1,387 MW online is a representation of 3,853 MW of installed renewable resource capacity at these interconnection points. This is because, as previously noted by SCE in Comment F1-6, the Reliability Base Case sets the output of these renewable resources to 36 percent of their maximum capability. Therefore, the Reliability Base Case reflects 3,853 MW installed capacity at these interconnection points (details in Table A4 of EIR Appendix 5, Attachment 2, p. 21), which is more than 2,800 MW in addition to the 1,050 MW installed capacity that is in-service as

noted by SCE in this comment. Notably, the 3,853 MW of installed capacity in Case #3 is also a level sufficient to accommodate the 3,800 MW Riverside East renewable resource portfolio in the transmission planning process, as transmitted in the March 11, 2015 letter from the CPUC to CAISO. Nothing in SCE's comment contradicts the EIR conclusion that the Phased Build Alternative satisfies the level of generation modeled with the Reliability Base Case in Case #3 (EIR Appendix 5, Attachment 2, p. 10).

The comment points to the EIR power flow study to indicate that the flow through the WOD corridor would be limited to 1,900 MW instead of the value of roughly 3,000 MW that is derived in the Draft EIR/EIS (see Table Ap5.1-4, p. Ap.5 Att.1-2). This comment is based on SCE's review of Case #6 in the power flow analysis. The conclusion for Case #6 shows that the Phased Build Alternative is not technically feasible in this scenario (EIR Appendix 5, Attachment 2, p. 12). The EIR clearly discloses that the Phased Build Alternative would have lower power flows and a lower corridor transfer capability than the Proposed Project (Appendix 5, Attachment 1 and Attachment 2).

The comment indicates that additional information would be needed to determine the actual level of generation deliverability, in MW, provided by the Phased Build Alternative. The comment notes this would require a deliverability study prepared in a manner consistent with the CAISO's deliverability study methodology. Note that Comment B9-8 indicates CAISO's intent to conduct a comparative analysis of project alternatives using the CAISO's deliverability study methodology, and CAISO intends to present its results in testimony in the CPUC general proceeding (A.13-10-020).

See also Responses to Comments B9-2, B9-3, B9-8, and B9-9 (CAISO comment).

F1-9 The comment claims that the Phased Build Alternative would not meet two of the three Basic Project Objectives, with this comment focusing on Basic Project Objective 2. See Response to Comment F1-8 regarding the modeled power flows and the lower levels of corridor transfer capabilities that are expected with the Phased Build Alternative in comparison with the Proposed Project.

SCE states that the Phased Build Alternative would create an impediment in achieving California's renewable energy goals, including a higher 50 % RPS in Senate Bill 350 (2015). This comment does not contradict the EIR conclusion that the Phased Build Alternative satisfies the level of generation modeled with the Reliability Base Case in Case #3 (EIR Appendix 5, Attachment 2, p. 10). The level of generation in this case is sufficient to accommodate the 3,800 MW Riverside East renewable resource portfolio in the transmission planning process, and the power flow analysis of Case #3 also includes the import of 1,400 MW from IID. The Reliability Base Case reflects 3,853 MW installed capacity at the Riverside East interconnection points (details in Table A4 of EIR Appendix 5, Attachment 2, p. 21), which is sufficient to accommodate the 3,800 MW Riverside East renewable resource portfolio for the 33% RPS in the transmission planning process, as transmitted in the March 11, 2015 letter from the CPUC to CAISO.

General Response GR-3 provides further information on the ability of the Phased Build Alternative to satisfy Basic Project Objective 2.

See also Response to Comment B9-3.

F1-10 This comment focuses on SCE's opinion that the Phased Build Alternative is infeasible due to construction requirements and design characteristics that could not be accommodated in what SCE feels is a reasonable period of time and could create impacts in areas not previously analyzed. The comment states that the Phased Build Alternative could require an expansion of planned wire stringing sites and additional stringing sites.

SCE states, "In order to install the Phased Build Alternative's 795 Aluminum Conductor Composite Reinforced (ACCR) conductor, planned wire sites would need to be modified and new wire sites would be required." SCE's observation is based upon manufacturer information regarding specific maximum allowable bending angles that cannot be exceeded when pulling ACCR conductor. The EIR recognizes that SCE would need to consider the specifications of the conductor material; however, this would not introduce any infeasibility as utility companies commonly handle different conductor types and sizes that have specific requirements or limitations on how the conductors are handled during pulling and installation.

The fact that SCE would need to revise its conductor stringing plan to address the specific requirements of ACCR conductor does not make use of ACCR technically infeasible. Specifically, SCE observes, "the practical effect of this difference is that SCE's Proposed Project allows constructing wire sites at a much greater angle from the path of the transmission line being constructed." Acknowledging that the use of ACCR conductor may preclude SCE from utilizing some planned stringing sites that would place a large angle on the conductor, it is anticipated that this is not the case for the majority of the stringing sites, assuming that most sites would not place a large angle on the conductor.

Furthermore SCE states, "There are very few locations where SCE could site additional pulling and tensioning locations to support the installation requirements of the 795 ACCR conductor without conducting extensive grading or locating wire sites outside the existing ROW." This statement appears to indicate that where the Proposed Project's stringing plan includes too large an angle for stringing ACCR, the use of ACCR would either require additional land disturbance, additional stringing locations, or placing the stringing operations outside of the existing ROW. None of these requirements make the use of ACCR conductor technically infeasible. SCE further comments "Even if it is feasible to relocate wire sites within areas suitable to limit wire stringing angle to within the manufacturer's specification, the environmental effects of such relocations need to be acknowledged."

The EIR discloses that the first step of the wire stringing activities is to develop a wire stringing plan that identifies, among other things, the set-up locations for the wire pulling equipment and activity (Section B.3.3.10). The EIR considers that wire sites can result in an environmental impact due to ground disturbance and other activity within the sites. However, in terms of ground disturbance and potential environmental effects the Phased Build Alternative is expected to have less overall environmental impact by reducing the number of existing towers to be removed and new towers to be constructed. In contrast with the Proposed Project, this would decrease the overall amount of ground disturbance, even if previously-anticipated changes in disturbance for set-up locations may occur for the conductor stringing sites. Based on the disturbed area SCE identified for each lattice steel tower, the disturbed area avoided, by reducing the number of structures removed and new structures built, is anticipated to be more than 400 acres. The comment fails to recognize the reduction in impacts resulting from the re-use of existing double-circuit lattice towers that would occur under the alternative.

With the ground disturbance for stringing setup and splicing setup at 2 acres and 0.7 acres, respectively, it can be seen that even with a need for additional wire stringing sites, the Phased Build Alternative would result in an overall reduction in ground disturbance when compared to the Proposed Project. These stringing sites would not notably increase the overall project disturbance area and associated impacts. Even under scenarios where a quarter to a third more stringing sites would be required, the difference of using ACCR conductor when considering both structure and stringing disturbances would be a net reduction in disturbed area of several hundred acres.

This comment also identifies SCE's concerns on: outages during construction of the Phased Build Alternative; the need for future construction within the corridor after implementing the alternative; and the environmental impacts of the future construction, should it become needed. These topics are addressed in subsequent individual Responses to Comments F1-11 through F1-14.

F1-11 This comment identifies SCE's concerns that outages during construction of the Phased Build Alternative would exceed those of the Proposed Project. SCE states that the need for double-line outages would increase under the alternative when compared with the Proposed Project. Outages of existing lines would be necessary during construction of the Proposed Project, and in the comment, SCE states, "With minor exceptions, the Proposed Project design placed the new towers in such a location that the construction could proceed without having to de-energize more than one of the four existing 220 kV circuits for long periods of time." SCE has also indicated that for the Proposed Project, a number of shoo-flies (temporary poles to hold up energized conductors) will need to be utilized. Pointing to uncertainty on whether CAISO might approve certain outages, SCE has not specified the precise location or timing of the shoo-flies for the Proposed Project.

Because the Phased Build Alternative would require stringing of new conductor on existing towers, the alternative will require more outages than would the Proposed Project. As with the Proposed Project, it is expected that to avoid some of the additional outages, shoo-flies will need to be utilized in order to carry energized conductors while construction is ongoing on the existing structures. After providing comments on the Draft EIR/EIS, SCE evaluated potential construction scenarios. To clarify how the need for outages could be minimized, SCE provided responses to Data Request 17 (Response ALT-29), which provides details on a construction plan for the Proposed Project and the Phased Build Alternative. In Response to Data Request ALT-29, SCE presents an alternative construction plan in which 136 shoo-flies would be required for the Phased Build Alternative, compared with 51 for the Proposed Project. Overall, the construction timeframe would be similar for the Phased Build Alternative and the Proposed Project due to the additional coordination required to manage outages. Outages would also need to occur during construction of the Proposed Project; the need to manage and coordinate similar outages would not make the Phased Build Alternative infeasible.

See also Response to Comment B9-4 regarding the potential for outages and line losses to influence generator dispatch, or generator curtailment and the associated economic loss.

F1-12 This comment includes SCE's opinion that the Phased Build Alternative is infeasible due to regulatory constraints in permitting future phases and due to the long lead time required to obtain approvals from the CPUC and BLM for new transmission. This comment identifies SCE's concerns regarding the need for future construction within the corridor after imple-

menting the alternative, based on SCE's presumption that future expanded transmission capacity would be needed. This comment and the presumption that future construction would be needed within the corridor are also repeated by SCE in Comment F1-13.

The EIR recognizes the long lead time in developing new transmission by describing the origin of the Proposed Project, as a part of SCE's 2005 application that proposed Devers-Palo Verde No. 2 project and then as a response to CAISO specifications for a Delivery Network Upgrade in 2010 (Section A.2.1.4.1). Clearly, the EIR contemplates that transmission additions do not occur "just in time" as implied by the comment. Ultimately, the CPUC must find that the project is necessary to promote the safety, health, comfort, and convenience of the public under General Order (GO) 131-D. See General Response GR-1 for a review of CPUC project-level review process, and GR-3 for a review of how the CAISO's Transmission Planning Process relates to the environmental review for this project-level request for a CPCN.

See also General Response GR-4 on the need for "future phases" of construction under the Phased Build Alternative.

F1-13 The commenter alleges the Draft EIR/EIS violates the CEQA prohibition against piecemeal environmental review by "chopping up" or "segmenting" the WOD Upgrade Project. See General Response GR-4 on the need for "future phases" of construction under the Phased Build Alternative.

As noted by the commenter, CEQA Guidelines Section 15378(a) defines a "project" as "the whole of an action" that may result in either a direct physical environmental change or a reasonably foreseeable indirect change. The commenter also correctly cites the seminal CEQA decision in *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, which adds to the requirement that an EIR describe and analyze the whole of an project by holding that an EIR's project description and analysis of potential project impacts must also include all relevant parts of a project, including reasonably foreseeable future expansion or other activities that are part of the project. Accordingly, the entire project being proposed for approval and all reasonably foreseeable project expansion must be described and analyzed in the EIR.

Without addressing the EIR's actual WOD Upgrade Project description located in Chapter B, however, the commenter inappropriately leaps to and applies these project description and project impact analysis principles to the EIR's determination of the basic project objectives and treatment of the Phased Build Alternative summarized in Chapter A (Introduction) and addressed in detail in Chapter C (Alternatives). Separate and apart from the requirements concerning the proposed project analyzed in an EIR, CEQA has distinct and different requirements for the description and analysis of *alternatives* to the proposed project. As discussed in Response to Comment F1-5, CEQA charges lead agencies with developing and presenting a comparative analysis of a reasonable range of feasible alternatives to the proposed project so that the public and decision-makers can make an informed evaluation of the merits of a proposed project as compared to the developed alternatives (CEQA Guidelines § 15126.6) and expressly affords lead agencies with the discretion to distill overly broad or narrow objectives down to fundamental basic objectives for purposes of conducting the required comparative analysis of the proposed project and its alternatives. In accordance with CEQA, EIR Sections C (Alternatives) and G (Comparison of Alternatives) and Appendix 5 (Alternatives Screening Report) adequately describe and evaluate a reasonable range of alternatives that meet most of the basic WOD Upgrade Project objectives.

Even if CEQA's requirements applicable to an EIR's description of the Proposed Project and analysis of its potential impacts applied equally to an EIR's description and comparative analysis of project alternatives, the EIR's alternatives analysis complies with all such requirements. Appendix 5 to the EIR (particularly Attachments 1 and 2 thereto) presents substantial evidence demonstrating that the Phased Build Alternative accurately describes the whole of the action proposed under that alternative, including its ability to accommodate and provide transmission capacity for all reasonably foreseeable electricity generation projects most likely to be in place and operational through the year 2024. That analysis is based in part on CAISO's 2024 Reliability Base Case. The information in EIR Appendix 5, and in Section A.2.3 (CPUC and BLM Project Objectives), along with General Response GR-4,provides an updated rationale based on the best available evidence as to the realistic level of future new electricity generating facility development in the east Riverside County region.

At its heart, SCE's argument is for maximizing the size of the project now because at some future date, the need for additional transmission is likely to arise. This type of argument is true for virtually any infrastructure that may need to increase capacity over time (e.g., bulk transmission lines, highways, water supply systems, and wastewater systems). The balance to be struck in transmission planning is between what is needed for current and reasonably foreseeable projects and the environmental impacts of meeting those needs now, and the unverified needs of speculative projects assumed to be developed at some future date. With regard to timing, SCE ignores the fact that these unknown and speculative future renewable energy projects would each have their own planning, design, review, and approval processes that will take time.

In sum, the EIR accurately, reasonably and consistently describes both the proposed WOD Upgrade Project as well as the Phased Build Alternative thereto, including all future electricity generation that is expected to access the grid as a reasonably foreseeable consequence of the WOD Upgrade Project.

F1-14 This comment claims that a greater level of environmental impacts would occur with the Phased Build Alternative, when presuming the need for future construction within the corridor after implementing the alternative. See General Response GR-4 on the need for "future phases" of construction under the Phased Build Alternative.

The comment repeats SCE's concern that wire stringing sites would warrant additional impact analysis. The EIR discloses that the first step of the wire stringing activities is to develop a wire stringing plan that identifies, among other things, the set-up locations for the wire pulling equipment and activity (Section B.3.3.10). The EIR considers that wire sites can result in an environmental impact due to ground disturbance and other activity within the sites. Response to Comment F1-10 provides additional information on this topic.

F1-15 The comment asserts that the Phased Build Alternative could result in towers that are not aligned, and that this can lead to conductor blow-out and increased visual impacts. The Phased Build Alternative was derived from the 2005 scenario previously proposed by SCE that would retain the existing double-circuit towers, and this means that the new double-circuit towers would be located next to each existing tower so the spans of both lines would match. Due to SCE's revised wind loading requirements, replacement of some of the existing double-circuit towers with stronger or higher structures would be necessary (as included in the description of the alternative), and for the new, second set of double-circuit towers, the stronger structure types would be utilized. This would allow the majority of structures to be

"soldiered" under the Phased Build Alternative in a manner similar to that of the Proposed Project. This approach avoids SCE's concerns related to blow-out and visual impacts. The alignment of the new and existing structures has been clarified in Appendix 5, Section 4.4 (description of the Phased Build Alternative).

F1-16 This comment presents SCE's opinion that the Phased Build Alternative would not be cost-effective and would delay the in-service date. The EIR provides preliminary information regarding the potential cost of the alternative, for the limited purpose of assessing whether it would be eligible for consideration as an alternative to the Proposed Project. General Response GR-1 notes that the CPUC evidentiary hearing is the appropriate venue for consideration of the cost of the project and alternatives, along with project need.

F1-17 This comment reviews SCE's concerns on the potential construction limitations under the Phased Build Alternative, as identified in previous comments and addressed in Responses to Comments F1-14 through F1-16. The comment also identifies potential implementation of a remedial action scheme (RAS) and additional reactive support that may be needed with the Phased Build Alternative, and characterizes these elements as adding operational complexity. The potential need for these operational elements and future reactive support (of up to 600 MVAR), and the resulting level of operational complexity, are described Response to Comment F1-6.

This comment also asserts that there would need to be additional interset structures to mitigate conductor sway and a longer construction period for which the impact analysis did not adequately address. There would be no need for offset structures; the new towers in the Phased Build Alternative are defined as being paired with the existing 220 kV double-circuit structures (see the alternative description in Appendix 5, Section 4.4, Phased Build Alternative). Further, the reader is referred to the response on construction timing of the Phased Build Alternative in Response to Comment F1-10.

F1-18 This comment provides additional detail on SCE's opinion regarding the cost of the Phased Build Alternative. The EIR provides preliminary information regarding the potential cost of the alternative, for the limited purpose of assessing whether it would be eligible for consideration as an alternative to the Proposed Project. General Response GR-1 notes that the CPUC evidentiary hearing considers the cost of the project, and alternatives, along with its need.

F1-19 The comment indicates that a greater level of electrical losses would occur with the Phased Build Alternative than would occur with the Proposed Project. This topic is addressed in Responses to Comments B9-4 and B9-11, and Response to Comment B9-4 addresses the potential for line losses to influence generator dispatch, or generator curtailment and the associated economic loss.

F1-20 SCE states that new engineering and design work could be triggered if the Phased Build Alternative is selected, thereby increasing the time and cost to construct as compared to the Proposed Project. The Draft EIR/EIS describes the basic design and potential construction timelines of the Proposed Project and Phased Build Alternative. In SCE's response to Data Request 17 (ALT-29), SCE presents a construction plan for the Phased Build Alternative and for the Proposed Project, indicating that it is considering the engineering and design process for the Phased Build Alternative. Although SCE has been working to engineer, design, and

refine the Proposed Project, the EIR acknowledges that final engineering cannot be complete until the project or an alternative are approved.

F1-21 SCE requests clarification regarding Mitigation Measures N-1a (Implement best management practices for construction noise) and N-1b (Implement a helicopter noise control strategy), noting that CPUC's authority over transmission construction preempts local ordinances. The EIR has been revised to clarify that SCE has not proposed to request variances for work outside of certain hours, and that SCE would consult with local jurisdictions. Please see Response to Comment F1-2, which addresses this matter.

F1-22 Please see the Response to Comment F1-3.

F1-23 Please see the Response to Comment F1-3.

F1-24 SCE requests that the Visual Resources Mitigation Measure VR-4a be eliminated because CEQA does not require the application of mitigation measures to less-than-significant impacts. While the Draft EIR/EIS analysis found that the majority of the Proposed Project's visual impacts would be less than significant, several locations would have significant impacts. Also, the Draft EIR/EIS was a joint EIR/EIS, and NEPA requires the application of feasible mitigation even if an impact is less than significant.

SCE also asserts the mitigation for operational impacts is onerous and that Mitigation Measure VR-8a (Minimize visual contrast in project design) presented in Section D.18.3.3 (Impacts and Mitigation Measures) should not be applied across the entirety of the project. The application of MM VR-8a across the entirety of the Project is appropriate in order to prevent the installation of excessively contrasting project elements. For example, several new transmission projects in recent years have resulted in the installation of structures built of excessively specular (shiny and reflective) steel that was insufficiently dulled in the manufacturing process. The slow pace of natural dulling of these structures results in long-term visual impacts. In at least one case, the application of a post-manufacture colorant was required to reduce structure specularity. The purpose of MM VR-8a is to prevent such an unfortunate post-construction modifications, which are time-consuming and costly. SCE does currently proposes to construct the Proposed Project with structural dulling and use of non-specular materials. If this is properly implemented, MM VR-8a would not impose any additional requirements. The mitigation measure is retained to address any Project design outcomes that are contrary to what has been proposed and described in the Project Description, because such outcomes have occurred on other recent transmission projects.

SCE also asserts that Mitigation Measure VR-9a (Treat structure surfaces) presented in Section D.18.3.3 (Impacts and Mitigation Measures) is not needed because the proposed Project structures and conductors would weather to a dull gray finish. Similar to MM VR-8a discussed above, SCE requests that Mitigation Measure VR-9a be removed from the EIR. However, Mitigation Measure VR-9a is appropriate in order to prevent the installation of excessively contrasting project elements. As noted above, several transmission projects in recent years have resulted in the installation of structures built of excessively specular steel that was insufficiently dulled in the manufacturing process. The slow pace of natural dulling of these structures results in long-term visual impacts. As described above, SCE has proposed to construct the project with use of structural dulling and non-specular materials, and if this occurs, Mitigation Measure VR-9a would not add new requirements. Mitigation Measure VR-9a is retained to address any Project design outcomes that are contrary to what has

been proposed and described in the Project Description. Also, because NEPA require the application of feasible mitigation even if impact is less than significant, it is appropriate to retain Mitigation Measure VR-9a.

F1-25 The commenter argues that solar projects identified in the EIR as connected actions should be analyzed as cumulative impacts. See Response to Comment F1-4.

F1-26 The commenter states that the Phased Build Alternative is not the Environmentally Superior Alternative and should be rejected due to its failure to meet the basic project objectives, its greater environmental impacts, and other aforementioned feasibility issues.

Please see Responses to Comments F1-1 through F1-25, which provide responses to the commenter's stated issues. The Phased Build Alternative remains environmentally superior to the Proposed Project overall. However, as is stated in Section G.3 (Comparison Methodology) of the EIR, it is possible that the decision-makers could balance the importance of each impact area differently. The decision-makers will also balance other non-environmental and community values issues outside of CEQA, including those raised in the projects' General Proceeding.