September 22, 2015

CPUC/BLM
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
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RE: CAISO Comments on the West of Devers Upgrade Project Draft Environmental Impact Report

Dear Ms. Blanchard;

I. Introduction

The California Independent System Operator Corporation (CAISO) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) prepared for the West of Devers Upgrade Project (Proposed Project) by the California Public Utilities Commission (CPUC). The CAISO is very concerned that the DEIR's Phased Build Alternative has not been adequately tested, may not meet the identified, immediate need for the Proposed Project, and will inappropriately restrict future development of renewable generation necessary to effectively and efficiently meet California's clean energy goals. The CAISO is specifically concerned that the DEIR does not use the renewable portfolios developed by the CPUC and used in the CAISO's transmission planning process to analyze the need for the Proposed Project. Further, the DEIR does not adequately explore issues, including potentially adverse environmental impacts, associated with further expansion of the Phased Build Alternative.

In accordance with its generator interconnection process tariff provisions, the CAISO initially identified the Proposed Project as necessary to connect certain renewable generation projects in the CAISO's interconnection queue to the CAISO grid. Subsequently, the CAISO confirmed the need for the Proposed Project in its Transmission Planning Process studies of public policy driven projects. The CAISO's public policy driven studies seek to identify transmission necessary to interconnect expected future renewable generation projects to meet State clean energy goals based on CPUC-developed renewable portfolios.

The CAISO's comments on the DEIR focus on two concerns with the selection of the Phased Build Alternative as the environmentally superior alternative: (1)) whether the DEIR properly defines project objectives and selects alternatives that meet those objectives; and (2) critical flaws in the technical analysis of alternatives to the Proposed Project The CAISO has no comments regarding the Tower Relocation Alternative or the Iowa Street 66 kV Underground Alternative.

II. Discussion

A. The DEIR Improperly Defines and Assesses Basic Project Objectives.

The DEIR defines the "Basic Project Objectives" for the Proposed Project as follows: (1) "to upgrade the WOD 220 kV transmission lines between Devers, El Casco, Vista, and San Bernardino Substations to increase system deliverability by at least 2,200 MW," (2) "to support achievement of State and federal renewable energy goals" and (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."[1] However, the DEIR's analysis of Basic Project Objective 2 does not align with the CAISO's and the CPUC's processes for identifying and approving public policy driven transmission projects. Instead, the DEIR focuses on interconnection queue information in isolation and does not reflect or take into account the renewable energy portfolios developed by the CPUC or the environmental and resource potential assessments already considered by the CPUC RPS analysis. Because the increased system deliverability discussed in Basic Project Objective 1 is directly related to achieving renewable energy goals, the flawed analysis with respect to Basic Objective 2 results in an inaccurate system deliverability number.

1. The DEIR's analysis of Basic Project Objective 2 does not reflect the Renewable Portfolio Standard (RPS) goals and portfolios developed by the CPUC.

As stated above, the CAISO initially identified the need for the Proposed Project as part of the generator interconnection process and subsequently affirmed the project's need based on studies of public policy driven projects in the transmission planning process. Importantly, the CAISO bases its transmission planning process policy studies on the RPS portfolios developed by the CPUC. Thus, the CAISO determined that the Proposed Project was needed based on RPS portfolios developed by the CPUC and provided to the CAISO for use in the CAISO's transmission planning process. As stated in the CAISO's 2014-2015 transmission plan:

> …The CPUC plays a primary role formulating the resource portfolios as the agency that oversees the supply procurement activities of the investor-owned utilities and retail direct access providers, which collectively account for 95 percent of the energy consumed annually within the [CAISO] area. The proposed portfolios are reviewed with stakeholders to seek their comments, which are then considered for incorporation into the final portfolios.
>
> The resource portfolios have played a crucial role in identifying public policy-driven transmission elements. Meeting the RPS has entailed developing substantial amounts of new renewable generating capacity, which will in turn required new transmission for delivery. The uncertainty as to where the generation capacity will locate has been managed recognizing this uncertainty and balancing the requirement to have needed transmission completed and in service in time to support the RPS against the risk of building transmission in areas that do not realize enough new

[1] SCE West of Devers Upgrade Project, Executive Summary, pp. ES-6-ES-7.

> generation to justify the cost of such infrastructure. This entailed applying a "least regrets" principle, which first formulates several alternative resource development portfolios or scenarios, then identifies the needed transmission to support each portfolio followed by selecting for approval those transmission elements that have a high likelihood of being needed and well-utilized under multiple scenarios.[2]

The DEIR gauges attainment of Basic Project Objective 2 by seeking to ensure that the various alternatives can achieve some level of additional renewable generation development; however, the DEIR fails to reference the volumes of renewable energy reflected in the CPUC-developed renewable generation portfolios. The CPUC's renewable generation portfolios serve as the basis for the CAISO's deliverability analyses and, as a result, are critical in defining project objectives and driving the need for policy driven projects. In defining the Basic Project Objectives, the DEIR fails to acknowledge the central role of CPUC-developed renewable generation portfolios in the transmission planning process. As such, the DEIR's analysis and conclusions are inconsistent with the CPUC's own RPS studies and portfolios that are intended to drive both renewable procurement by load serving entities and the identification of needed transmission upgrades to ensure achievement of the State's RPS goals.

The CPUC and the CAISO have acknowledged the importance of agency coordination in developing and studying the renewable energy portfolios to identify policy driven transmission projects. This was most recently reiterated in the March 11, 2015 letter from CPUC President Picker (CPUC) and California Energy Commission Chairman Weisenmiller (CEC) to Steve Berberich, CAISO President and Chief Executive Officer, regarding Base Case Renewable Resource Portfolio and an Alternative Renewable Resource Portfolio for the CAISO 2015-2016 Transmission Planning Process.[3] In this letter, the CPUC and CEC recommended specific renewable energy portfolios for the CAISO to study in its 2015-2016 transmission plan. This letter also refers to the May 2010 Memorandum of Understanding (MOU) between the CAISO, the CPUC and the CEC which called for increased transmission planning coordination, especially with regard to policy driven projects. Specifically, the MOU notes that CAISO will present "a formal assessment of the transmission planning needs within the [CAISO] balancing authority area for the CPUC-provided renewable resource scenarios."[4] This reinforces that the CPUC-developed renewable energy portfolios drive project objectives and need.

Although the CAISO understands that the CPUC-developed portfolios are not the only information relevant to achieving renewable energy goals, any additional information should complement and support the development of plans capable of meeting the portfolios. Such information should not undermine achievement of the CPUC's portfolios. The DEIR's focus is narrow in this regard because it merely cites to the CAISO's interconnection queue and notes that the alternative projects meet current

[2] CAISO 2014-2015 Board of Governor Approved Transmission Plan, March 27, 2015, pp. 20-21.
[3] http://www.cpuc.ca.gov/NR/rdonlyres/C8D2FA01-E466-45C1-984B-663C7B827182/0/2015_16TPP_Portfoliotransmittal_ltr.pdf.
[4] Attachment A, Memorandum of Understanding between the CPUC and CAISO Regarding the Revised CAISO Transmission Planning Process, p. 2.

interconnection queue needs.[5] The DEIR ignores that the Proposed Project is also designed to meet much broader public policy goals, in particular, providing accesses to other generation reflected in the CPUC's RPS portfolios. Reviewing the interconnection queue information may be helpful as a directional indicator; however, that narrow review should not—and cannot—form the basis for an analysis of whether the proposed alternatives meet the State's renewable energy goals. The CPUC has separately identified the targeted RPS portfolios for achieving the state's energy goals.

In its only substantive reference to the CPUC-developed portfolios, the DEIR notes that discussions with CPUC RPS staff led to the conclusion that renewable resource shortfalls resulting from an alternative with less capacity than the Proposed Project could be accommodated by increased renewable development in other locations.[6] However, this conclusion erroneously assumes that the only consideration for siting renewable projects in the CPUC-developed portfolios is the sufficiency of transmission. The conclusion does not take into account all other factors considered in determining the renewable resources selected in the RPS portfolios, such as resource potential, cost and environmental issues. It does not appear that the CPUC RPS staff was consulted as to whether it would be appropriate or desirable to reassign assumed renewable energy development based solely on transmission considerations.[7] A DEIR is not the appropriate forum to effectuate a change in the CPUC's RPS portfolios, and it undermines the processes that have been established to identify RPS portfolios and identify transmission needed to meet the State's RPS goals.

The CAISO recognizes that time has passed since SCE submitted the initial application for the Proposed Project. As a result, the DEIR needed to take into account updated information. However, the CAISO believes that the updated information should have been based on the CPUC-developed renewable energy portfolios provided in the 2014-2015 planning cycle and the resulting conclusions developed in the 2014-2015 transmission plan.

The CAISO will develop testimony in this proceeding relying on the most up-to-date available information, which is currently the CPUC-developed RPS portfolios provided to the CAISO for use in the 2015-2016 transmission planning cycle.[8]

[5] DEIR Appendix 5, Project Alternatives Assessment, pp. 10-12.
[6] DEIR Appendix 5, p. Ap-5-53.
[7] DEIR Appendix 5, p. AP-5-53. ("The EIR/EIS preparers asked CPUC RPS Staff to test the "RPS Calculator" to show how future renewable resource portfolios might change with a smaller upgrade to WOD than SCE has proposed. With RPS Calculator V.5: there would be no additional transmission capacity needed elsewhere in the state to make up for generation decreased in Riverside East; and renewable generation in Westlands or other zones (including San Diego South and Solano) would replace the generation decreased in Riverside East, using existing transmission capacity available in the other zones. With RPS Calculator V.6.1: there would be no impact on the generation selected in Riverside East or elsewhere.")
[8] http://www.cpuc.ca.gov/NR/rdonlyres/C8D2FA01-E466-45C1-984B-663C7B827182/0/2015_16TPP_Portfoliotransmittal_ltr.pdf.

2. The DEIR and Basic Project Objectives 1 and 2 do not meaningfully consider potentially higher renewable energy goals.

Although Basic Project Objective 2 identifies the need "to support achievement of State and federal renewable energy goals," the DEIR analysis did not materially consider potential renewable energy goals in excess of the current 33% by 2030 legislative requirement. Instead, Basic Project Objective 1 narrowly defines the goal of increasing deliverability by "at least 2,200 MW." This limited goal is not informed by potentially higher renewable energy goals that have recently been considered by the legislature, the Governor and the CPUC itself. Because the Basic Project Objective 1 is narrowly drafted, the DEIR's preferred alternative, the Phased Build Alternative, is not tailored to meet higher renewable energy goals.

During the preparation of the DEIR, the Governor and the state legislature were actively engaged in efforts to increase the State's renewable energy goals. In addition, in the context of the long-term procurement plan proceeding, the CPUC has studied scenarios with renewable energy goals in excess of 33%.[9] The DEIR analysis does not account for potentially higher renewable energy goals, and the DEIR was issued prior to the legislature's passage of Senate Bill 350 directing investor owned utilities to achieve to a 50% RPS by 2030.[10]

The DEIR notes that additional capacity can be added to the Phased Build Alternative in the future if additional upgrades are needed.[11] The DEIR states that this may be accomplished by either constructing a new circuit in the existing transmission corridor or by reconductoring the Phased Build Alternative at a later date. Although the DEIR acknowledges the potential impacts of those later steps, it does not explore them in sufficient detail to support the Phased Build Alternative. Specifically, the CAISO believes that the following factors must be analyzed in greater detail prior to determining whether the Phased Build Alternative is preferred over the Proposed Project:

a. The cost and environmental impacts of salvaging the upgraded towers and building additional transmission lines in the future, as well as reconductoring the newly constructed double circuit line under the Phased Build Alternative;
b. The challenges in obtaining outages that will be necessary to allow the construction of the Phased Build Alternative, which will become more difficult in the future as increased amounts of renewable generation come on line, as well as the potentially higher lost generation production under the Phased Build Alternative.
c. Higher resistive losses incurred under the Phased Build Alternative, contributing to higher energy costs and greenhouse gas emissions. The CAISO expects that use of Drake

[9] Assigned Commissioner's Ruling on Updates to the Planning Assumptions and Scenarios for Use in the 2014-2015 Long-Term Procurement Plan and the California Independent System Operator's 2015-2016 Transmission Planning Process, March 4, 2015, p. 42.
[10] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.
[11] DEIR Executive Summary, p. ES-16.

1-795 ACCR will have approximately four times the resistive losses of 2B-1590 ACSR. There appears to be no quantification of the expected cost implications or consideration of the environmental impact of such significant additional line losses.[12] The increased losses are an environmental and policy issue, especially given the state's emphasis on energy efficiency and reduced greenhouse gas emissions.

B. The DEIR's Alternative Analysis Requires Technical Clarification.

1. The alternative analysis relies on an incorrect calculation of deliverability need for generators in the CAISO's interconnection queue.

As stated in Section II.A of these comments, the CAISO believes that the project objectives should be defined and assessed based on the CPUC-developed renewable energy portfolios and the CAISO's policy driven transmission planning studies based on those portfolios. However, the alternative analysis conducted in the DEIR aims to increase system deliverability by "at least 2,200 MW" based solely on projects identified in the CAISO's interconnection queue. In addition to disagreeing with this unduly limited approach to defining project objectives, the CAISO has reviewed the analysis and has identified certain technical clarifications that should be addressed in the DEIR.

The DEIR's 2,200 MW deliverability target is based solely on an analysis of projects in the CAISO's interconnection queue. The DEIR notes that "the [transmission cluster] Phase 2 study indicated a need to provide deliverability for ~2200 MW of new queued generation projects; and whereas the CAISO response to the first set of Data Requests indicates a level of 1881 MW (nearly five years later)."[13] These statements do not provide a complete picture of current interconnection needs and cannot serve as the basis for establishing the appropriate deliverability limit.

In particular, this analysis fails to acknowledge that the 1,881 MW of generation in the CAISO interconnection queue is incremental to the 985 MW of generation currently receiving Full Capacity Deliverability Status through the West of Devers interim upgrade. The West of Devers interim upgrade is not an acceptable or approved long term solution to provide deliverability because it is not capable of operating with the capacity additions in the Proposed Project. Instead, the interim upgrade will be removed and replaced by the Proposed Project. Accordingly, based on the information that was available during preparation of the DEIR, the project selected in this proceeding would need to support deliverability for at least an additional 2,866 MW (1,881 MW of queued generation plus 985 MW of existing and queued generation) to accommodate all projects requesting interconnection through Cluster 7 of the CAISO's generator interconnection process.

[12] See DEIR, Appendix 5 p. AP-5-55. ("Line losses: ACCR material has higher electrical losses. These losses would result in economic consequences, but these would have to be compared to the reduced construction cost achieved from the reuse of the existing 220 kV towers.")
[13] DEIR Appendix 5, Project Alternatives Assessment, p. 6.

The CAISO stresses, however, that this information is out dated because currently 3,631 MW of incremental generation is seeking interconnection and Full Capacity Deliverability Status in Cluster 8 of the CAISO's interconnection process. The CAISO does not imply that system reinforcements should be sized to accommodate all generation in the interconnection queue, but rather the constant (and significant) state of change in the interconnection queue further reinforces the need for holistic, more-forward looking planning based on the policy-driven portfolios developed by the CPUC.

2. The DEIR reflects a misunderstanding and misinterpretation of the CAISO reliability-driven and policy-driven analyses.

The DEIR inappropriately uses the CAISO's 2024 Reliability base case to establish deliverability provided by alternatives to the proposed project.

The DEIR specifically notes as follows:

> The CAISO's 2024 Reliability base case, from the CAISO's 2013/2014 transmission planning process (one of the base cases used in the alternative analysis) represents the view from the CAISO's and SCE's perspective (a collaborative effort) of the level of generation deemed viable (based on a number of criteria) and to be in place and operational in 2024. The generation level within the Eastern Bulk system for the region under analysis (refer to Table A4 in Appendix A) is:
>
> - Total Generation On-line: 3754 MW
> - Total Generation Capacity: 6901 MW[14]

The DEIR incorrectly states that these quantities reflect the view of the CAISO and Southern California Edison Company (SCE) regarding the level of generation deemed viable and that will be in place and operational in 2024. The generation portrayed in the 2024 Reliability case simply reflects a share of the CPUC-developed portfolio amounts that was allocated to the ISO-controlled grid, with other shares allocated to the Imperial Irrigation District (IID) through the location of resources making up the portfolio amounts. Furthermore, the CAISO adjusts dispatch as necessary in the reliability base case to adequately test the reliability of the system.

In contrast, the CAISO 2013-2014 policy-driven analysis relied upon the "commercial interest (base)" portfolio provided by the CPUC. The 2014-2015 transmission plan used this same base case portfolio, noting that this "portfolio was identified as the appropriate base case for the ISO to study in its 2014-2015 transmission planning process because it represents the most likely path of renewable development in the future."[15] Unlike the reliability base case, the policy-driven analysis seeks to ensure deliverability for the renewable energy portfolio and does not adjust dispatch to test reliability.

[14] DEIR Appendix 5, Project Alternatives Assessment, p. 5.
[15] CAISO 2014-2015 Transmission Plan, p. 177.

3. The DEIR analysis relies on import level from IID that is inconsistent with the renewable generation portfolios and current CPUC direction.

The DEIR analysis relies on incorrect assumption that 1,400 MW imports will be realized from IID.[16] The CAISO recognizes that at the time SCE developed its application, procurement for achieving the 33% RPS objective was not completed, and the CPUC had provided direction to investor owned utilities to conduct procurement assuming that up to 1,400 MW of renewable generation could be deliverable from within IID.[17] However, the CPUC subsequently revised that directive and clarified that the investor owned utilities should no longer assume a maximum import capability of 1,400 MW from IID.[18]

This change in circumstance further supports the need to rely on the CPUC-developed renewable portfolios developed specifically for long term transmission planning purposes.

4. The DEIR methodology for assessing the impacts of the Phased Build Alternative on generation development appears to be based on a comparative benchmarking rather than an explicit study of deliverability.

The CAISO's deliverability methodology is publicly available, extensively documented, and fully vetted through the transmission planning process. Rather than performing a comparative analysis of the project alternatives, the CAISO suggests that its deliverability analysis be used to determine whether the preferred alternatives provide the necessary deliverability. The CAISO intends to conduct this deliverability analysis and present its results in prepared direct testimony in A.13-10-020.

5. The DEIR incorrectly implies that the Phased Build Alternative satisfies Project Alternatives Assessment Case #4.

In the Project Alternatives Assessment,[19] the DEIR studies the capabilities of the Proposed Project and Phased Build Alternative to meet selected study cases. Case #4 specifically studies the CAISO Cluster 7 Phase 1 generation levels. The analysis states that:

> the purpose of evaluating this case and associated sensitivities was to establish and determine an upper end of the loading spectrum. If the proposed 795 Drake ACCR conductors can withstand the extra loading imposed by the higher penetration of

[16] DEIR Appendix 5, p. AP-5-48. ("Based on power flow modeling completed for this alternative (see results in Table A3 in Attachment 2 to this appendix), this alternative satisfies the CAISO's 2024 Reliability Base Case, which includes specific generation projects that the CAISO has determined to be most likely to be constructed plus a scenario of 1,400 MW from IID to the CAISO.")
[17] CPUC Decision (D.) 12-11-016.
[18] D.14-11-042, p. 116. ("It is reasonable to remove the Commission's requirement to assume a maximum import capability of 1,400 MW from IID Balancing Authority Area as directed in June 7, 2011 ACR and D.12-11-016.")
[19] DEIR Appendix 5, Project Alternatives Assessment.

generation modeled in this base case, then the other less stressed scenarios will pass the test.[20]

The Project Alternative Assessment concludes that the Proposed Project satisfies Case #4. However, there is no indication whether the Phased Build Alternative satisfies Case #4. Specifically, the narrative indicates that the ***Proposed Project*** has "no overloading of facilities and the worst loading is on the Devers–Vista circuit at 56% and 68% under single and double contingencies respectively." Because the Phased Build Project conductor has an emergency ampacity equal to only 47% of Proposed Project, the observed 56% and 68% loading would exceed the capability of the proposed conductor for the Phased Build Alternative. Based on this narrative, it appears the Phased Build Alternative would not satisfy Project Alternative Assessment Case #4.

6. The DEIR does not provide sufficient detail regarding specific impacts of the Phased Build Alternative.

The Phased Build Alternative consists of (1) replacing two single circuit towers with a new double circuit tower capable of supporting 2-1590 ACSR conductors but strung with 1-795 ACCR conductor, and (2) strengthening and/or raising a portion of the existing double circuit tower and re-stringing it with 1-795 ACCR. The level of detail provided in the DEIR is not sufficient for the CAISO to develop a specific recommendation regarding the Phased Build Alternative at this time, other than to identify certain concerns and the need for additional information. In any event, the CAISO believes the following concerns related to the Phased Build Alternative should be addressed in the Final Environmental Impact Report:

a. Using a smaller single conductor is not identified as having any materially different environmental impact during construction, but the need to re-string in the future will have an additional environmental impact in an area presumably recovering from the initial construction disturbance. This additional impact should be included in the analysis of the Phased Build Alternative.
b. Accommodating future outages to a double circuit line (after additional renewable generation has connected to the grid and is dependent on the circuits) may be more challenging and will could result in increased curtailment of renewable generation during the construction period, causing negative environmental and market impacts, especially if both circuits need to be de-energized during construction. The CAISO notes that it is not likely that one circuit can be re-strung with an energized line on the adjacent tower position.
c. Using the smaller conductor on the new construction increases transmission line losses on those circuits approximately by a factor of four, which raises both

[20] DEIR Appendix 5, Project Alternatives Assessment, p. 10-11.

environmental and policy issues given the State's energy efficiency objectives. In addition it is inefficient and ultimately increases costs.

The CAISO has not yet conducted a complete review of these issues, and makes no specific recommendation at this time. However, the apparent inconsistencies identified above should be addressed in the Final Environmental Impact Report.

III. Conclusion

The CAISO appreciates the opportunity to provide these comments on the DEIR and looks forward to presenting more detailed analysis in the context of A.13-12-020.

Respectfully,

/s/ Delphine Hou
Delphine Hou
External Affairs Manager

ATTACHMENT A

Memorandum of Understanding
Between
The California Public Utilities Commission (CPUC)
And
The California Independent System Operator (ISO)
Regarding
The Revised ISO Transmission Planning Process

The ISO has proposed revisions to its transmission planning process to enable the ISO to identify the transmission infrastructure needed to achieve certain state policy targets including, but not limited to, 33 percent renewable generation procurement by load serving entities by 2020.

The CPUC develops renewable generation portfolio scenarios as part of its Long Term Procurement Plan process that will assist the ISO in identifying transmission projects needed under various renewable generation location assumptions and developing a comprehensive transmission plan.

The CPUC and the ISO desire to work together to coordinate the ISO's revised transmission planning process and identification of needed transmission infrastructure with the CPUC's subsequent siting/permitting processes.

The revised ISO transmission planning process will provide opportunities for the ISO and the CPUC to coordinate the ISO's scenarios analysis and development of the ISO's comprehensive transmission plan with the CPUC's siting/permitting processes.

Accordingly, the CPUC and the ISO agree to the following:

1. The California Transmission Planning Group process, which is a major part of Phase 1 of the ISO transmission planning process, will develop an annual statewide conceptual transmission plan that will become the starting point for further review and analysis in Phase 2 of the ISO transmission planning process. The ISO and the CPUC will participate in the California Transmission Planning Group process to incorporate, to the extent practical, alternative planning scenarios that will enable that effort to identify an initial set of needed "least regrets" transmission facilities for consideration in TPP Phase 2.

2. In Phase 2 of the 2010-2011 cycle of the ISO transmission planning process, the ISO will consider and incorporate into its plan scenarios from the CPUC Long Term Procurement Plan process, to the maximum extent practical given the goal of identifying needed renewable access elements of the Phase 2 plan by December 2010. The CPUC will provide notice that Phase 2 of ISO transmission planning process will consider and incorporate these scenarios, and the subsequent CPUC siting/permitting process will then give substantial weight to project applications that are consistent with the ISO's final Phase 2 plan.

3. The CPUC and the ISO will review the results of the California Transmission Planning Group modeling phases and evaluate their implications for the transmission needs of the CPUC's Long Term Procurement Plan renewable resource scenarios. The ISO will subsequently seek, within the time and human resource constraints of Phase 2 of the

transmission planning process, to provide the CPUC and other stakeholders with a formal assessment of the transmission planning needs within the ISO balancing authority area for the Long Term Procurement Plan renewable resource scenarios.

4. CPUC and ISO will determine a process for subsequent cycles of the ISO transmission planning process, by which the ISO will formally assess scenarios provided by the CPUC. Provided the CPUC meets parameters agreed to by both parties with regards to the number, timing, and format of the scenarios, the ISO will provide CPUC and other stakeholders with a formal assessment of the transmission planning needs within the ISO balancing authority area for the CPUC-provided renewable resource scenarios.

5. For Phase 2 of the transmission planning process, the ISO will conduct a stakeholder process that complies with Order 890 of the Federal Energy Regulatory Commission (FERC) and allows meaningful public participation to ensure that appropriate study assumptions and scenarios are identified to support development of the final Phase 2 plan. Stakeholders will have opportunities to comment on published drafts of the Phase 2 plan, as well as on the final Phase 2 plan that will be submitted for approval to the ISO Board of Governors. The final Phase 2 plan for the ISO balancing authority area will reflect the ISO's consideration of all stakeholder comments and recommendations received during the planning process.

6. The final Phase 2 plan will identify specific needed transmission facilities, and will distinguish between Category 1 facilities which merit unconditional approval based on the concept of "least regrets," versus Category 2 facilities which may be needed depending on the course of future generation development.

7. The facility specifications in the final Phase 2 plan will provide sufficient detail to enable eligible parties to develop and submit, in Phase 3, proposals to build the Category 1 facilities, including construction schedules and detailed cost estimates. During the next annual cycle of the California Transmission Planning Group and ISO transmission planning processes, parties may suggest alternatives to the Category 2 facilities, and the ISO will re-evaluate these facilities and consider any submitted alternatives in developing the next annual transmission plan.

8. ISO participating transmission owners and other parties will have opportunities to build elements of the final Phase 2 plan that are not covered under transmission categories assigned to participating transmission owners to build under the ISO tariff. Parties may propose to build specific Category 1 facilities identified in the Phase 2 plan, or, for Category 2 facilities, may propose alternative elements to meet the same functional needs.

9. Proposals to build specific Category 1 transmission facilities that are identified in the final Phase 2 plan would proceed directly to the CPUC and/or other siting authorities for Certificate of Public Convenience and Necessity, California Environmental Quality Act and other siting/permitting requirements.

10. In cases where two or more proposals are submitted and found by the ISO to be technically acceptable for constructing the same Category 1 facility, the CPUC will choose, as needed, between two or more CPUC-jurisdictional proposals. In cases where two or more duplicative project proposals are all being considered by the same siting authority, the ISO will defer to the siting authority to choose between the projects. In cases where two or more duplicative project proposals are being considered by different siting authorities, the ISO will choose among the proposals based on objective criteria to be established.

11. The CPUC and ISO recognize that this Memorandum of Understanding is being

completed based on the ISO's revised transmission planning process proposal, which will be submitted to FERC in the near future, and which the subsequent FERC order could modify. If any FERC-ordered modifications substantively affect the terms of this Memorandum of Understanding, the CPUC and ISO will collaborate to develop appropriate revisions to the Memorandum of Understanding.

The CPUC and the ISO understand and agree to the terms of this Memorandum.

California Public Utilities Commission

By: Michael R. Peevey Date: 5-13-10
Name: Michael Peevey
Title: Commission President

By: Paul Clanon Date: 5·13·10
Name: Paul Clanon
Title: Executive Director

California Independent System Operator Corporation

By: Y. Mansour Date: 5-13/10
Name: Yakout Mansour
Title: President and CEO