PUBLIC UTILITIES COMMISSION
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CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

May 16, 2012

Steve Berberich
California Independent System Operator
President and Chief Executive Officer
P.O. Box 639014
Folsom, CA 95763-9014

Re: Revised Base Case and Alternative Scenarios for CAISO 2012-2013 Transmission Planning Process

Dear Mr. Berberich:

The California Public Utilities Commission (CPUC) and California Energy Commission (Energy Commission) would like to thank the California Independent System Operator (CAISO) and stakeholders participating in the CAISO's Transmission Planning Process (TPP) for this opportunity to revise the renewable scenarios presented in the March 23, 2012 update letter.

On March 12, 2012, the CPUC and the Energy Commission sent a letter formally transmitting recommended scenarios for the CAISO's 2012-2013 TPP in fulfillment of our ongoing commitment under the May 2010 Memorandum of Understanding to ensure a coordinated planning process. These scenarios were updated in a March 23, 2012 letter. At the April 2, 2012 CAISO 2012-2013 TPP stakeholder meeting, the CPUC and Energy Commission presented the proposed scenarios. Many stakeholders participated in the meeting and twenty-two stakeholders filed detailed written comments with CAISO on the proposed scenarios. Based on the careful consideration of the stakeholder comments, the CPUC and Energy Commission (the "Commissions") have revised the four scenarios as depicted in Attachment 1.

Stakeholder comments fell largely into three categories: (a) issues with the process through which the scenarios were developed, (b) issues with use of the "cost-constrained" scenario as the base case, and (c) issues with specific assumptions used in the 33% Renewable Portfolio Standard (RPS) Calculator. In response to concerns with the process, the Commissions agree with stakeholders that additional stakeholder input on the development of the scenarios for 2012-2013 would have been beneficial. In order to ensure greater stakeholder input in the future, the CPUC will address the development of the 2013-2014 scenarios in its current Long Term Procurement Plan rulemaking, R.12-03-014. The Energy Commission will commit its staff to assist in updating

the environmental information in this proceeding. The Commissions may provide further policy guidance based on the record and stakeholder comments in the rulemaking proceeding.

Many of the stakeholders expressed concerns about using the "cost-constrained" scenario as the base case in the CAISO TPP because the scenario did not reflect the considerable steps developers and utilities have taken to pursue projects through power purchase agreements and licensing procedures. In response to these concerns, the Commissions now recommend the CAISO use the "commercial interest" scenario as the base case for the 2012-2013 TPP. We also encourage the CAISO to study the "cost-constrained," the "environmentally-constrained," and the "high distributed generation (DG)" scenarios.

Stakeholders also expressed concern over the accuracy of the assumption that projects located in non-CREZ areas would be able to deliver their energy over existing transmission facilities. Under such assumptions, these non-CREZ projects would incur low transmission costs in the 33% RPS Calculator biasing the portfolios towards non-CREZ resources. The Commissions agree that this assumption, while correct for some of the non-CREZ resources, is not appropriate for many of them. Therefore, CPUC staff updated the 33% RPS Calculator after working with CAISO staff to assign most of the non-CREZ resources to CREZs that would use the same transmission facilities. The transmission costs of some of the remaining non-CREZ resources are captured by the addition of four new "transmission areas" that are similar to CREZs: Central Valley North, Merced, Los Banos and El Dorado (Nevada). The result of the changes can be seen in the new scenarios. For example, the number of non-CREZ resources decreased from 4,661 MW in the March 23, 2012 "commercial interest" scenario to 530 MW in the revised scenario. It is a reasonable assumption that the remaining resources not included in any CREZ nor in the four new "transmission areas" could use existing transmission.

In addition, the inclusion of the CAISO's revised Westlands CREZ transmission capacity in conjunction with the changes for non-CREZ resources has increased the generation in Westlands to 1,500 MW in all but the "High DG" scenario. Further, the 33% RPS Calculator was updated to reflect an increased cost for the transmission upgrades for the Riverside East CREZ, using $650 million to represent the estimated cost of the West of Devers reconductoring. Another revision is that the permitting scores of all CPUC Energy Division database resources have been updated to reflect more current information (specifically the February 2012 Project Development Status Reports).

The Commissions acknowledge that in adopting these scenarios the CAISO may need to give further consideration to well-advanced generation projects located in Nevada being connected to the Valley Electric transmission system. This may be necessary to ensure those projects are reflected on a comparable basis to discounted core projects in California, addressing differences in generation permitting practices between the two states.

The Commissions have several policy recommendations to the CAISO related to the Desert Renewable Energy Conservation Plan's findings that the West Mojave region is a favorable location for future renewable generation development and that nearby Department of Defense facilities may also be favorable locations. Given these findings, the Commissions anticipate the need for additional CAISO analysis of the area in the context of utility applications for certificates of public convenience and necessity expected to be filed in the next twelve months. By anticipating this analysis, we do not prejudge any future CPUC findings about the need for any transmission upgrades.

The Commissions also have a policy-driven recommendation regarding transmission infrastructure in the Imperial Irrigation District (IID) Balancing Authority Area. In the CPUC's current RPS rulemaking, R.11-05-005, the June 7, 2011 Assigned Commissioner Ruling Regarding Resource Adequacy Value of RPS Projects in the Imperial Irrigation District Balancing Authority Area[1] found that it would be unreasonable for Pacific Gas and Electric, Southern California Edison Company, and/or San Diego Gas and Electric to use a maximum import capability of less than 1,400 MW for imports from projects within the IID Balancing Authority Area as part of the evaluation of projects and bids within the 2011 Renewables Portfolio Standard (RPS) solicitation. The CPUC relied on the CAISO's revised forward-looking Maximum Import Capability calculation process, the planned transmission capabilities inside the CAISO footprint, the renewable scenarios provided to the CAISO by the CPUC staff and the intentions and ability of IID to upgrade its transmission system to support greater export from IID to the CAISO footprint.

The Commissions now understand that the cost of IID reinforcements recovered from generation development in the area may be a further impediment to the development of renewable generation resources in the region north of the Imperial Valley substation. In light of the continued objective of effectively and efficiently meeting California's 33 percent RPS goals and the identification of

[1] R.11-05-005, June 7, 2011 *Assigned Commissioner Ruling Regarding Resource Adequacy Value of RPS Projects in the Imperial Irrigation District Balancing Authority Area*, available at: http://docs.cpuc.ca.gov/efile/RULINGS/136670.pdf.

parts of the Imperial Valley in the Desert Renewable Energy Conservation Plan as a Renewable Energy Study Area, the Commissions encourage the CAISO to consider (or investigate) and advance as necessary additional transmission reinforcements into the region to enable delivery of at least 1,400 MW of renewable generation from IID.

If you have any questions about the details of the scenarios, please contact Kevin Dudney at 415-703-2557 or kevin.dudney@cpuc.ca.gov or Roger Johnson at 916-654-5100 or roger.johnson@energy.ca.gov.

Sincerely,

Michael R. Peevey
President, CPUC

Robert B. Weisenmiller
Chair, CEC

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Paul Clanon, CPUC Executive Director
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Keith Casey, CAISO VP for Market and Infrastructure Development
Karen Edson, CAISO VP for Policy and Client Services
Robert Oglesby, Energy Commission Executive Director
Roger Johnson, Energy Commission's Siting, Transmission, and Environmental Protection Division Deputy Director

| | Commercial Interest | Cost | Environment | High DG |
|---|---|---|---|---|
| Weight on Cost | 0.1 | 0.7 | 0.1 | 0.7 |
| Weight on Evironment | 0.1 | 0.1 | 0.7 | 0.1 |
| Weight on Commercial Interest | 0.7 | 0.1 | 0.1 | 0.1 |
| Weight on Permitting | 0.1 | 0.1 | 0.1 | 0.1 |
| | | | | |
| Major transmission upgrades | Merced - 1 | n/a | Los Banos - 1 | n/a |
| | Kramer - 1 | | Merced - 1 | |
| | Los Banos - 1 | | | |
| **Portfolios in MW** | | | | |
| Discounted Core | 7,396 | 7,168 | 7,168 | 12,474 |
| Commercial Non-Core | 4,027 | 2,254 | 2,291 | 2,214 |
| Generic | 5,706 | 7,422 | 7,931 | 3,045 |
| Total | 17,130 | 16,844 | 17,390 | 17,734 |
| | | | | |
| Alberta | 450 | 450 | 450 | 450 |
| Arizona | 550 | 550 | 550 | 550 |
| Baja | 100 | - | - | - |
| Carrizo South | 900 | 900 | 900 | 900 |
| Distributed Solar - PG&E | 1,047 | 1,047 | 1,837 | 3,641 |
| Distributed Solar - SCE | 599 | 599 | 1,978 | 3,226 |
| Distributed Solar - SDGE | 405 | 405 | 426 | 490 |
| Imperial | 2,125 | 1,125 | 2,125 | 1,125 |
| Kramer | 762 | 62 | 62 | 62 |
| Mountain Pass | 665 | 1,045 | 365 | 665 |
| Nevada C | 142 | 142 | 116 | 142 |
| NonCREZ | 529 | 1,077 | 655 | 721 |
| Northwest | 330 | 330 | 290 | 290 |
| Palm Springs | 198 | 188 | 198 | 83 |
| Riverside East | 1,400 | 1,400 | 805 | 1,060 |
| Round Mountain | - | - | 34 | - |
| San Bernardino - Lucerne | 101 | 261 | 108 | 187 |
| San Diego South | 384 | 384 | 384 | - |
| Solano | 535 | 535 | 535 | 535 |
| Tehachapi | 3,390 | 4,556 | 3,370 | 2,429 |
| Westlands | 1,500 | 1,500 | 1,500 | 990 |
| Central Valley North | 183 | 268 | 268 | 168 |
| El Dorado | 400 | - | - | - |
| Merced | 65 | 20 | 65 | 20 |
| Los Banos | 370 | - | 370 | - |
| Total | 17,130 | 16,844 | 17,390 | 17,734 |