STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
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SAN FRANCISCO, CA 94102-3298

CALIFORNIA ENERGY COMMISSION
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June 13, 2016

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

Re: Base Case Renewable Resource Portfolio for the CAISO 2016-2017 Transmission Planning Process

Dear Mr. Berberich:

With the submission of this letter, the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC) formally transmit to the California Independent System Operator (CAISO) the renewable resource portfolio that our Commissions jointly recommend should be studied in the 2016-17 Transmission Planning Process (TPP) base case reliability assessments.

The CPUC and the CEC recommend reusing the "33% 2025 Mid AAEE" RPS trajectory portfolio that was used in the 2015-16 TPP studies, as the base case renewable resource portfolio in the 2016-17 TPP studies. It is a fully-deliverable portfolio which was developed using an older RPS Calculator, version 5. CPUC, CEC, and CAISO ("the agencies") staff held extensive conversations regarding the pros and cons of developing new portfolios using the new RPS Calculator (version 6) vs. using a portfolio based on the previous RPS Calculator (version 5).

The agencies' staff discussed the implications of developing a new 33 percent RPS portfolio using the new RPS Calculator vs. relying on a 33 percent RPS portfolio from the old RPS Calculator. The new RPS Calculator would fill a smaller RPS net short because it creates portfolios using the most recent 2015 CEC IEPR forecast, which forecasts increased levels of customer generation and, a resulting, lower demand than the previous IEPR forecast. In contrast, the old RPS Calculator filled a relatively larger RPS net short because it created portfolios using the previous (2014) IEPR forecast, which forecasted higher statewide demand. Hence, a 33 percent RPS portfolio developed with the new RPS Calculator would be smaller – in terms of MW and GWh – and might not support currently approved transmission projects. It is undesirable to use a renewable portfolio in the TPP base case that might require reexamination of previously approved transmission investment decisions.

The agencies' staff also discussed resource constraints, process alignment challenges, as well as the many implications on infrastructure planning introduced by the "Clean Energy and Pollution Reduction Act of 2015" (Senate Bill (SB) 350), which among other things, requires 50 percent of California's electricity to come from renewable sources by 2030. Furthermore, Executive Order B-30-15, establishes a new statewide greenhouse gas (GHG) emissions target of 40 percent below 1990 levels by 2030 to ensure meeting the existing target of 80 percent reduction by 2050. The Governor directed all state agencies to implement measures, pursuant to statutory authority, to help achieve these targets. Developing the transmission needed to support increasing amounts of renewable resources and reducing GHG emissions will require careful planning and coordination across the West.

On July 30, 2015, we sent a joint letter to you establishing the Renewable Energy Transmission Initiative 2.0, also known as RETI 2.0. This was in response to the Governor's Executive Order B-30-15.

In September 2015, the California Natural Resources Agency (CNRA), California Energy Commission (Energy Commission), California Public Utilities Commission (CPUC), California Independent System Operator (CAISO) and Bureau of Land Management (BLM) responded to the letter and initiated the RETI 2.0 to facilitate the long-range planning, interagency coordination, and stakeholder engagement necessary to support these goals. RETI 2.0 is a proactive, statewide, non-regulatory planning forum intended to identify the constraints and opportunities for new transmission to access and integrate new renewable resources and help meet the state's long-term GHG and renewable energy goals.

In last year's agency transmittal letter to the CAISO, the CEC noted that the Integrated Energy Policy Report proceedings are identifying how environmental information can be used for statewide renewable energy generation and transmission planning processes. As part of this effort, the CEC is working with local, state, federal, tribal and other partners to advance the environmental and land use evaluations for infrastructure planning. Progress in this effort is demonstrated in the San Joaquin Valley Solar study that was recently completed.

The insights, scenarios, and recommendations that are developed through the RETI 2.0 stakeholder process and CEC land use evaluations will frame and inform future transmission planning proceedings with stakeholder-supported strategies to help reach the state's ambitious 2030 energy and environmental goals. The agencies' staff agreed that it would be inappropriate to plan significant transmission expansion investments to access increased renewable resources before the agencies have fully analyzed alterative renewable portfolios and selected a preferred course of action for infrastructure investment enhancements. For example, if a fully-deliverable portfolio consisting of a RPS percentage greater than 33 percent is studied by the CAISO as part of its TPP base case reliability assessments, such a portfolio would likely result in an indication that new transmission capacity is needed to exceed a 33 percent RPS. Given the range of potential implementation paths for a 50 percent RPS, it is undesirable to use a renewable portfolio in the TPP base case that might trigger new transmission investment, until more information is available.

In conclusion, for the reasons above, the CPUC and the CEC recommend reusing the 33 percent RPS trajectory portfolio that was used in the 2015-16 TPP studies, as the base case portfolio in the 2016-17 TPP studies. This recommendation aligns with the CAISO's reply comments to the CPUC's Long-Term-Procurement-Plan (LTPP) proceeding served on February 29, 2016.[1] This joint submittal fulfills our ongoing commitment under the May 2010 Memorandum of Understanding which called for transmission planning coordination between the CPUC and the CAISO.

If you have any questions about the details of this recommendation, please contact Carlos Velasquez at 415-703-1124 or carlos.velasquez@cpuc.ca.gov or Al Alvarado at 916-654-4749 or al.alvarado@energy.ca.gov.

Sincerely,

Michael Picker
President, CPUC

Robert B. Weisenmiller
Chair, CEC

Cc. Timothy Sullivan, CPUC Executive Director
Keith Casey, CAISO VP for Market and Infrastructure Development
Tom Doughty, VP for Customer and State Affairs
Robert Oglesby, Energy Commission Executive Director
Edward Randolph, CPUC Energy Division Director

[1] "The CAISO strongly supports staff's recommendation to use the 33% RPS portfolios for the 2016-17 transmission plan. Changing the portfolios used to plan the 33% RPS goals at this point will cause the CAISO to revisit already approved transmission solutions designed to meet the 33% RPS goal. This would in turn cause serious industry uncertainty regarding the state of already approved transmission solutions."