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

March 11, 2015

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 and an Alternative Renewable Resource Portfolio for the CAISO 2015-2016 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 two renewable resource portfolios that our Commissions jointly recommend should be studied in the 2015-16 Transmission Planning Process (TPP).

As you may be aware, the CPUC's Energy Division staff is in the process of a major overhaul of the RPS Calculator in the RPS proceeding (R.15-02-020). One of the reasons for this overhaul is to enable the study of potential renewable portfolios higher than 33 percent. CPUC staff recently held a public workshop on the "new" RPS calculator (v6). The RPS calculator resulting from this overhaul is not yet ready to inform the 2015-16 TPP.

In past workshops on portfolios for the 2013-14 and 2014-15 TPPs, the CEC and CPUC received comments focusing on the need to increase the robustness of the environmental analysis, especially outside the Desert Renewable Energy Conservation Plan area. The CEC began its process last summer in support of the 2014 Integrated Energy Policy Report (IEPR) update. The CPUC Staff discussed plans to develop a new environmental screening method in the RPS Calculator Staff Proposal issued in October 2014 and it is expected that further guidance will be provided via ruling later this year. The CEC and CPUC will work in collaboration with stakeholders to incorporate environmental screening metrics into the new RPS Calculator.

Furthermore, the focus of the CEC's August 2014 IEPR workshop¹ was to discuss how environmental information has been used in renewable energy generation and transmission planning processes to date. A related purpose was to explore how future planning processes might use environmental information to inform energy infrastructure planning for possible future renewable energy targets beyond the 2020 timeframe.

As part of this effort, the Energy Commission is working with local, state, federal, tribal and other partners to advance the current capabilities of landscape-scale analysis and evaluation. This work includes evaluating existing environmental data and tools currently available and identifying data gaps and opportunities for improvement. The overall effort will identify how environmental information could be used in energy resource decisions, and support the CPUC LTPP and CAISO TPP processes.

In light of these efforts, CPUC, CEC, and CAISO staff held extensive conversations regarding the pros and cons of producing a set of RPS portfolios for the 2015-16 TPP using the current ("old") RPS Calculator (v5). The three agencies' staff discussed CPUC resource constraints, process alignment challenges, as well as the fact that rerunning the current RPS calculator would not produce materially different RPS portfolios from those that were produced and submitted to the CAISO for the 2014-15 TPP.

These conversations resulted in CPUC, CEC, and CAISO staff deciding not to re-run the current RPS calculator, but rather, reusing 2014-15 TPP RPS portfolios in the 2015-16 TPP, with a limited update made to the locational information for distributed generation (DG) projects in SDG&E's service territory.² This limited update was performed on the "33% 2024 Mid AAEE" and the "High DG 33% 2024 Mid AAEE + DSM" portfolios produced for the 2014 TPP. These two updated RPS portfolios – now called the "33% 2025 Mid AAEE" and the "High DG 33% 2025 Mid AAEE + DSM" portfolios – are the portfolios we are recommending that the CAISO study in the 2015-16 TPP and DG deliverability studies. The "33% 2025 Mid AAEE" portfolio is the Base Case portfolio. As in the 2014-15 TPP, these two portfolios give preference to projects that have an approved power purchase agreement and, at least, a "data adequate" status as it pertains to all major siting applications that are necessary for construction. While the portfolios have been revised to include SDG&E's DG locational update, no other updates have been made. As such, recent facility retirements and PPA terminations are not reflected in this year's portfolios.

The CPUC and CEC understand that, building on last year's work, the CAISO is conducting additional studies regarding access to renewable generation projects in the Imperial Irrigation District. We look forward to seeing the results of that analysis.

¹ August 5, 2014 Lead Commissioner Workshop on Integrating Environmental Information in Renewable Energy Planning Processes, http://www.energy.ca.gov/2014_energypolicy/documents/#08052014

This update resulted from a SDG&E response to a CPUC data request. PG&E's/SCE's responses to similar data requests were incomplete and incompatible with the data fields we needed in order to update the Output Module spreadsheet; as such, DG locational updates were not incorporated for PG&E's/SCE's DG projects embedded in these portfolios.

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 the scenarios, please contact Carlos Velasquez at 415-703-1124 or carlos.velasquez@cpuc.ca.gov or Roger Johnson at 916-654-5100 or coeff-roger.johnson@energy.ca.gov.

Sincerely,

Michael Picker President, CPUC Robert B. Weisenmiller Chair, CEC

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Cc. Timothy Sullivan, CPUC Executive Director
Keith Casey, CAISO VP for Market and Infrastructure Development
Karen Edson, CAISO VP for Policy and Client Services
Robert Oglesby, Energy Commission Executive Director
Brian Turner, CPUC Deputy Executive Director
Edward Randolph, CPUC Energy Division Director
Roger Johnson, Energy Commission's Siting, Transmission, and Environmental Protection
Division Deputy Director

Enclosure

Breakout By Technology		
Scenario Name	33% 2025 Mid AAEE	High DG 33% 2025 Mid AAEE + DSM
Net Short (GWh)	30,551	26,562
经验证的证据的证据的证据的证据的证据的证据的证据的证据的证据的证据的证据的证据的证据	Portfolio Totals (MW)	Portfolio Totals (MW)
Discounted Core	9,109	11,440
Generic	3,311	0
Total	12,420	11,440
Technology	MW	MW
Biogas	20	20
Biomass	103	103
Geothermal	235	171
Hydro	-	; iv.
Large Scale Solar PV	7,411	3,595
Small Solar PV	2,074	5,745
Solar Thermal	1,350	827
Wind	1,227	979
Total	12,420	11,440
New Transmission Segments	Kramer - 1	Kramer - 1
	Riverside East - 1	- C 10 10 10 10 10 10 10 10 10 10 10 10 10

Breakout By CREZ		
Scenario Name	33% 2025 Mid AAEE	High DG 33% 2025 Mid AAEE + DSM
Net Short (GWh)	30,551	26,562
	Portfolio Totals (MW)	Portfolio Totals (MW)
Discounted Core	9,109	11,440
Generic	3,311	0
Total	12,420	11,440
CREZ	MW	MW
Alberta	300	300
Arizona	400	400
Baja	100	100
Carrizo South	900	300
Distributed Solar - PG&E	984	3,449
Distributed Solar - SCE	565	1,988
Distributed Solar - SDGE	143	157
Imperial	1,000	1,000
Kramer	642	62
Mountain Pass	658	165
Nevada C	516	266
NonCREZ	185	133
Riverside East	3,800	1,400
San Bernardino - Lucerne	87	42
San Diego South		(#
Solano		
Tehachapi	1,653	1,285
Westlands	484	389
Central Valley North	×	(#
Merced	5	5
Total	12,420	11,440
New Transmission Segments	Kramer - 1	Kramer - 1
	Riverside East - 1	