

AWEA CALIFORNIA CAUCUS COMMENTS ON THE CAISO'S 2017-18 TRANSMISSION PLANNING PROCESS STUDY PLAN

The American Wind Energy Association (AWEA) California Caucus (ACC) appreciates the opportunity to offer comments on the California Independent System Operator's (CAISO or ISO) February 28th Transmission Planning Process (TPP) stakeholder meeting, 2017-18 TPP Study Plan, and 2017-18 economic studies. ACC appreciates the CAISO's efforts to study a variety of 50% Renewable Portfolio Standard (RPS) futures, via special studies, in the 2016-17 TPP. Though these studies will not be used as a basis for procurement or build decisions, ACC believes there has been considerable value in studying these futures and beginning to understand the potential transmission implications of a 50% RPS. The CAISO should be commended for this effort and for providing valuable information to its diverse stakeholders as a result of the 50% RPS special studies. Below, ACC comments on the importance of near-term action, including the provision of additional information on transmission solutions to achieve a 50% RPS. Near-term study work can help preserve the potential for California ratepayers to receive significant benefits of extremely low-cost wind energy that is available at a deep discount to California consumers for a relatively short time as a result of the declining federal Production Tax Credit (PTC) benefits. ACC suggests revisions to the 2017-18 TPP Study Plan, which will provide the CAISO and stakeholders with more valuable information in the near-term. ACC also proposes an economic study concept for analysis in the 2017-18 TPP which may help California ratepayers benefit from the value of the PTC, even in the absence of a 50% RPS study.

If Wind Generation Might be Procured for California's RPS within the Next Ten Years, Procuring Generation Sooner will Provide Ratepayers with the Benefits of the Full Production Tax Credit (PTC) and Should Be Explored

In the coming months, ratepayers throughout the county have a unique opportunity to procure wind generation at historically low prices. The combination of wind technology improvements, reduced capital costs, and the federal tax credits have combined to offer ratepayers the opportunity to procure wind generation at, what will likely be, all-time low prices. But timing is paramount to securing the lowest-cost wind resources. In order to be eligible for the full PTC under "safe harbor" provisions, wind projects must be installed by the end of 2020. There are dwindling opportunities to capture the full PTC after 2020. If California wishes to access these benefits, there is little time for additional transmission and resource planning studies.

Waiting a full year, or more, to evaluate opportunities for regional wind resources could mean that California's ratepayers will not be able to receive the full benefits of the PTC. Even for local wind resources, which can offer benefits of lower overgeneration and reduced instances of negative pricing more immediately than wind requiring interregional studies or long—distance transmission lines, assessments need to begin soon in order to ensure access to benefits of the full PTC. If California ratepayers are going to realize the substantial benefits offered by the federal tax credits, transmission and resource planning studies must be conducted now. Ideally these studies would be the basis for procurement/build decisions. ACC recognizes that direction from the California Public Utilities Commission (CPUC) will be required for this type of public policy based study and is not yet available, However continuing to conduct informational studies will prove beneficial in providing perspectives when the CAISO is able to make build/procurement decisions.

Additionally, ACC recognizes that California utilities may not need additional renewable resources as early as 2020, the date by which wind must be placed in-service to receive full PTC benefits. But, it may be possible for wind generators to build wind facilities before 2020, and sell the output into the wholesale market for a few years. This would be possible as long as there is an underlying Power Purchase Agreement (PPA) with a utility that begins at a later date (in the early-mid 2020s). In other words, if California utilities might procure wind in 2025, California's processes should consider enabling the signing of PPAs well in advance to that date to facilitate access to the full value of the federal PTC.

ACC respectfully submits that, if the planning agencies in California feel that wind might be a part of a future California resource portfolio, now is the time to initiate study work. Because timing is so critical to capturing the

lowest possible costs for ratepayers, ACC advocates two proposals, discussed below. One would enable the CAISO to continue to provide valuable information on transmission solutions to the 50% RPS portfolios and the other asks the CAISO to study, from an economic perspective, whether enough benefits currently exist to justify transmission to regional renewable resources.

The CAISO's 2017-18 Study Plan should Continue to Work on the 2016-17 50% RPS Special Studies by Performing Informational Studies to Analyze Possible Transmission Solutions

The results of the 2016-17 50% special studies highlight some of the opportunities associated with diverse renewable procurement. The study analyzing “out-of-state” resources shows significantly lower levels of renewable curtailments and congestion than the “in-state” studies. The “out-of-state” study shows some limited congestion outside of California. While measuring congestion is not the best measure of how the 50% RPS portfolios may impact the system and which benefits each portfolio provides, identifying congestion, and other potential issues associated with a 50% RPS build-out is a first step in analyzing these portfolios. Additional study work is needed to understand potential solutions to the issues uncovered in the 50% RPS studies.

The ISO is proposing some limited work on the 50% RPS special studies over the remainder of 2017. However, ACC respectfully submits that the ISO is focused on the wrong area for additional work on the 50% RPS. Rather than continued work on the four “Interregional Transmission Projects” with the other western planning regions, the ISO should focus on its own special studies of potential transmission solutions for the 50% RPS cases that were studied as a part of the 2016-17 TPP.

The 2017-18 TPP Study Plan currently states that “*the interregional portion of the analysis [on the 50% RPS special studies] is still ongoing.*” ACC does not believe that valuable information will be achieved through continued work on this cycle’s Interregional Transmission Projects. The other western planning regions have indicated the proposed Interregional Transmission Projects are not necessary or are not beneficial in their current planning cycles, and the other planning regions are unlikely to meaningfully participate in continued analyses of these projects. Therefore, the ISO should instead focus on its own “special studies” in 2017 to better understand the potential transmission additions that may be required to mitigate issues identified in the 50% RPS special studies that were conducted as part of the 2016-17 TPP. This should include analysis of transmission options which were formally submitted as “Interregional Transmission Projects” but also of other potential transmission solutions. ACC asks the CAISO to forego any additional “Interregional Coordination” work on the formal Interregional Transmission Projects, and to instead focus on how a variety of potential transmission solutions may help achieve California’s 50% RPS while mitigating congestion, reliability issues, and renewable curtailment. This type of study work, in the current planning cycle, may also be beneficial in providing the CAISO with regional project solution(s) to compare interregional projects to in a subsequent planning cycle.

For the 2017-18 TPP, this suggested work can proceed as information-only and, of course, would not be used as the basis for procurement/build decisions by the CAISO. This work will help prepare the ISO and stakeholders for future TPP work to identify any necessary transmission solutions to facilitate achievement of the 50% RPS. There is significant value in providing stakeholders with information on transmission solutions during the current TPP, rather than waiting for another TPP cycle to begin analyzing options. Without additional ISO studies in this area, the CAISO, stakeholders and regulatory agencies may be underprepared for such an analysis in next year’s TPP, which may further delay the construction of any necessary transmission additions to achieve the state’s renewable energy requirements at lowest cost. For these reasons, ACC strongly urges the CAISO, as part of the 2017-18 TPP, to proceed with studies that help identify transmission solutions to the issues identified in the 50% RPS studies that were performed during the 2016-17 TPP.

2017-18 Economic Planning Study

ACC has highlighted the critical importance of timing in wind procurement decisions to offer Californians the option to procure the lowest cost wind resources. The delay in studying portfolios for the 50% RPS has the potential to delay renewable procurement and transmission solutions to a point in time where California ratepayers may not be able to take advantage of the full PTC. However, regional renewable resources may offer

benefits beyond the RPS, which warrant study outside of the CAISO's "public policy process." Thus, the CAISO should study the economic benefits of regional renewable resources. The low cost of wind combined with the resource diversity benefits offered by regional renewable resources may have significant economic benefits. These benefits may include reduced production costs and decreased Resource Adequacy (RA) costs (especially from reduced flexible RA requirements and costs), among others.

During the 2017-18 economic study process, the CAISO should use its economic assessment methodology (The Transmission Economic Assessment Methodology, or TEAM) to study the economic benefits, including RA benefits of regionally diverse resources, such as regional wind. The reductions in flexible RA requirements associated with a diverse resource portfolio may be significant enough to justify transmission resources on an economic basis, without taking into account any "public policy benefits" which would also be provided. ACC supports CAISO's efforts in the 2017-18 TPP to perform any economic studies that evaluate the capacity, RA, production cost savings, and other benefits associated with procurement of regional renewable resources.

Conclusion

There is a unique and fleeting opportunity for utilities across the country to access wind resources at what will likely be the lowest prices ever recorded. In order to preserve the possibility that California ratepayers can access these resources, if they are determined to be part of a future California portfolio, the CAISO should proceed with additional studies in the 2017-18 TPP. The additional studies should build on the 50% RPS Special Studies from 2016-17 by studying potential transmission solutions to deliver those portfolios. The studies should also assess whether regional renewable resources offer sufficient economic benefits, especially from reduced RA costs, to justify new or upgraded transmission facilities. ACC respectfully requests that the CAISO pursue both these avenues to ensure ratepayers in the state of California have an opportunity to take advantage of historically low-cost wind. Thank you, again, for the opportunity to provide this input.