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*Comment Received From: Danielle Osborn Mills*  
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**AWEA California Comments on the June 20, 2018 IEPR Commissioner Workshop**

*Additional submitted attachment is included below.*



July 5, 2018

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

*Submitted electronically*

**RE: AWEA California Comments on the June 20, 2018 IEPR Commissioner Workshop on Renewable Integration and Electric System Flexibility (18-IEPR-06)**

Dear Commissioners and Energy Commission Staff:

The American Wind Energy California Caucus<sup>1</sup> (AWEA California Caucus or ACC) provides the following comments on the 2018 IEPR workshop on integrating renewable energy resources. ACC supports the Commission's efforts to evaluate the changes in electricity demand that may result from the state's aggressive decarbonization goals in the transportation sector. It is prudent to evaluate how new renewable energy resources can be effectively integrated to meet this demand at least cost to consumers. Understanding the operational challenges associated with higher renewable energy penetration levels is critical to informed decision making, particularly in the Integrated Resources Planning ("IRP" proceedings).

The panels at the June 20<sup>th</sup> workshop highlighted the potential for integrating large amounts of renewable energy to meet California's long-term climate goals. For example, the E3 presentation concludes that in 2050, a high electrification "best case" scenario includes a diverse

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<sup>1</sup> Members of the AWEA California Caucus include global leaders in utility-scale wind energy development, ownership, and operations, and many members also develop and own other energy infrastructure such as transmission lines, utility-scale solar, and energy storage. ACC is unanimous in its commitment to the need for—and widespread economic benefits derived from—a diverse and balanced portfolio in California to reliably and affordably meet state energy demands and environmental goals. The AWEA California Caucus strives to direct the economic and environmental benefits of utility-scale wind energy to California.

renewable portfolio with 44 GW of regional wind resources.<sup>2</sup> ACC supports the conclusions in the E3 presentation and agrees that regional wind would help California achieve its long-term climate objectives at least cost to consumers. However, to make this vision a reality, the State will need to focus on several improvements to the existing planning processes. Specifically, we outline the following outstanding issues:

1. Near-term procurement of tax-advantaged renewable generation can optimize ratepayer savings.
2. Regional transmission planning will ensure improved integration of regional renewable resources.
3. Refined demand forecasting is necessary to account for customer load-shifting and to resolve uncertainty.
4. Studies of wind reliability services this summer will provide current information on the flexibility and ancillary services provided by variable energy resources, such as utility-scale wind energy.

**1. Near-term procurement of tax-advantaged renewable generation can optimize ratepayer savings.**

In order to minimize costs to California ratepayers, there must be procurement in the near term that takes advantage of the limited availability of federal tax credits. Procurement must happen in 2019 in order for developers to pass on the savings of 80% PTC-eligible projects through long term PPA prices.

California load entities (LSEs) can offer ratepayers an opportunity for significant savings due to the fleeting availability of the federal Production Tax Credit. The federal PTC for wind amounts to a discount for customers of an inflation-adjusted 2.3 cents/kWh at full value to California load-serving entities via Internal Revenue Service (IRS) ‘safe-harbor’ provisions because several gigawatts of regional high-capacity factor wind projects were pre-qualified in

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<sup>2</sup> See E3 Presentation at slide 10: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=223869>.

2016 at 100% PTC value and in 2017 at 80% PTC value by developers. If those projects are contracted with a California LSE, they may proceed with construction and commence commercial operations by 2020 or 2021, respectively, or maintain continuous construction until the project is placed into service, while still retaining the federal PTC discount for California ratepayers.<sup>3</sup> It is worth noting that bids and contracts can be structured to allow for delivery of PTC-eligible wind to begin when an LSE identifies need (e.g. later in the 2020s), however contract execution and approval should move forward expeditiously in order to meet the IRS guidelines.

## **2. Regional transmission planning will ensure improved integration of regional renewable resources.**

The CAISO must engage in more coordinated, regional transmission planning. In the CPUC Integrated Resource Planning Process, ACC recommended that the Commission direct the CAISO to include a policy-driven case that studies at least 1,500 MW of wind from Wyoming and at least 1,500 MW of wind from New Mexico as part of the 2018-2019 TPP, which would allow for formal transmission decisions to be made in the first quarter of 2019 if these resources are included in the Preferred System Plan adopted by the Commission in 2018. The CAISO has indicated that they will complete more formal studies of transmission needed to serve regional wind and other renewables once procurement takes place. The CEC and the CPUC should coordinate to formally ask the CAISO to study a portfolio that includes higher amounts of regional wind resources in order for the transmission necessary to be actually accounted for in the TPP and in turn the IRP process. Without this information from the TPP, future iterations of the IRP will not be able to fully account for regional wind resources because it won't be clear whether transmission will get built to access these resources.

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<sup>3</sup> U.S. Department of Energy. Renewable Energy Production Tax Credit. <https://energy.gov/savings/renewable-electricity-production-tax-credit-ptc>.

### **3. Refined demand forecasting is necessary to account for customer load-shifting and to resolve uncertainty.**

The CEC should refine its demand forecasting activities to develop new assumptions about load shifting. Load-shifting is frequently used as a basis for avoiding procurement by IOUs. The CEC plays a vital role in framing this debate because the CEC is responsible for developing demand forecasts and making recommendations on statewide energy policy. As noted in the 2018 – 2030 demand forecasts recently adopted by the CEC, statewide consumption is expected to grow, largely due to increased demand for electric vehicle charging. Considering these load growth assumptions, ACC contends that a more prudent option than deferred renewable energy procurement would be for the energy agencies to ensure that future load growth as predicted by the CEC is met with lowest-cost, best fit renewable resources. The obligation to procure renewable energy ought to be assigned to the LSE with existing load to avoid more expensive procurement of renewable energy in the future. For a limited time, low-cost, high capacity-factor wind is available at a significant discount due to declining federal tax incentives. If California does not capture this fleeting opportunity, the longer-term costs of complying with the current RPS (let alone an expanded RPS) will be considerably higher than waiting until the early 2020s to procure additional renewable energy resources. If CCA load assumptions continue to affect the utilities' approaches to procurement, then California should develop more granular projections of CCA load growth and consider how those projections should best be incorporated into RPS planning proceedings.

### **4. Additional studies will provide current information on the flexibility and ancillary services provided by variable energy resources, such as utility-scale wind energy.**

ACC supports the CAISO's efforts to test a wind plant this summer for regulation up / down capability, voltage control, active power management capability, frequency response and inertia capability.<sup>4</sup> Better understanding the capabilities of wind resources to provide these types of

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<sup>4</sup> See CAISO Presentation at Slide 22, available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=223856>.



services will better enable future changes to products and services that renewable resource developers may be able to develop to better meet the needs of system operators.

The RPS will continue to play a critical role in meeting the state's aggressive environmental targets. Utility scale renewables can and should be proactively procured in a way that balances California's current system and minimizes costs for California ratepayers. Realizing these benefits will require near-term coordination among the agencies on both procurement and transmission planning. The AWEA California Caucus appreciates the Commission's consideration of these comments.

/s/ Danielle Osborn Mills

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