

**DOCKETED**

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**AWEA-California Comments on SB 100 Inputs and Assumptions  
3920**

Attached please find comments of the American Wind Energy Association of California (AWEA-California) on the Inputs and Assumptions to the SB 100 Report.

*Additional submitted attachment is included below.*

March 9, 2020

California Energy Commission  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814-5512



Docket # 19-SB-100

**Subject: Inputs and Assumptions Workshop on SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future**

Dear Chair Hochschild, Chair Nichols, and Commissioner Randolph,

The American Wind Energy Association of California (AWEA-California) appreciates the opportunity to comment on the Inputs and Assumptions Workshop for the SB 100 Joint Agency Report.

As indicated at the workshop, AWEA-California is perplexed as to why the agencies propose excluding high-capacity-factor wind and out of state wind from so many of the resource scenarios.<sup>1</sup> For example, as it appears on slide 32 of the CEC's presentation, out of state wind and offshore wind are allowed as 'available' resources separately, but not together, in the RPS+ high electrification scenarios, and that the resources – either separately or together – will be excluded from a number of other scenarios as well. The rationale for this proposal is very unclear to us.

It is reasonable to expect that some amount of both offshore wind and some amount of out of state wind will be part of a 2045 least-cost portfolio with high electrification, given the expected 100-150 GW of new renewable resources which will be needed. In addition, out-of-state wind and offshore wind are both excluded from the high hydrogen and high biofuels scenarios. In total, out-of-state wind is available in four of the eight scenarios and offshore wind is available in four of the eight scenarios to be studied. Given the limited quantity of in-state wind available for development, the vast quantity of total new renewables expected to achieve 2045 GHG targets, and the fact that wind energy (both land-based and offshore) offers the greatest source of renewable resource diversity to complement solar energy, AWEA-CA is confused as to why these resources are unavailable to compete in half the scenarios proposed for the SB 100 Joint Agency Report.

Regardless of the rationale, however, this approach is problematic on several levels:

1. **Creates a bias:** The slides suggest that no other resources is constrained in resource availability in the same way as high-capacity-factor wind. This creates a bias against wind energy and a situation where all other clean energy resources are guaranteed to be available for selection in every scenario, except for offshore and/or out of state wind.

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<sup>1</sup>Presentation from Mark Kootstra, California Energy Commission, "SB 100 Analytical Approach," Slide 32

2. **Conveys a false dilemma:** This framing suggests for some reason that there is a binary choice to be made between offshore wind and out-of-state transmission to access regional wind, when both resources could provide diversity benefit and reliability to the state's electric grid.
3. **Fails to meet legislative intent of SB 100:** Section 399.11 of the Public Utilities code requires the report to address the stated need for a diversified and balanced energy generation portfolio. Using inputs based on unjustified constraints that limit resource or geographic diversity will result in a portfolio that is neither diversified nor balanced.
4. **Fails to reflect stakeholder feedback:** According to the CEC presentation<sup>2</sup>, stakeholder feedback to-date has emphasized the need for the modeling to be technology inclusive and maximize optionality. This study design expressly excludes high-capacity factor wind and minimizes optionality.

*Additional questions for agency staff and consultants*

Based on the presentation from E3 at the workshop, it is also unclear how including or leaving out offshore wind and out-of-state wind on new transmission will affect the assessment of the cost and value of these resources. Specifically, we'd like to understand how RESOLVE accounts for the fixed costs of new transmission to access offshore wind. If transmission assumptions for offshore wind are based on model inputs drawn from the CPUC's 2019-2020 IRP, it is likely that very high transmission costs are applied to offshore wind. If this is the case, AWEA- CA would recommend an approach that estimates the transmission costs of specific transmission investments to access offshore wind in the North Coast and Central Coast.

In addition, as the SB 100 study seeks to assess the demand, capacity and resource needs across California's multiple balance authority areas, AWEA-CA would like to understand how SB 100 is assessing the transfer capacity from out-of-state or offshore resources potentially connecting into California outside the CAISO. For example, could the model consider capacity available to connect out-of-state wind through LADWP's transmission system to the CAISO? Thus, we request additional detail on the inputs and assumptions for offshore wind, out-of-state wind, and associated transmission in order to provide more thorough feedback in this docket.

AWEA-CA supports the comments from the CAISO identifying offshore wind and out of state wind as opportunities for helping achieve SB 100 goals while maintaining reliability and resource adequacy, in addition to the need for policymakers to direct the CAISO on which new resources will be needed so that transmission solutions can be evaluated and planned accordingly.<sup>3</sup> Indeed, given the long time horizon of the SB 100 study and the tremendous quantity of electric system resources required to achieve SB 100 goals, the Joint Agencies should not be hamstrung by the limits of the CPUC 's 2045 flexibility study, IRP, or the CAISO Transmission Planning process. For the SB 100 report, the joint agencies should proactively consider transmission investments which will be necessary over the next 25 years to access diverse resources and build a reliable portfolio.

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<sup>2</sup> Presentation from Mark Kootstra, California Energy Commission, "SB 100 Analytical Approach," Slide 14

<sup>3</sup> Delphine Hou, CAISO, "Planning for reliability and resource adequacy under SB 100," Slide 10.

Finally, we would like to reiterate our comments from the November 18, 2019 Technical Workshop on the SB 100 Joint Agency Report, filed on December 2, 2019 in this docket.

### **Conclusion**

AWEA-California appreciates the Joint Agencies' efforts to lead the transformation of electric sector to achieve SB 100 goals. We request an opportunity to provide additional comments once we've had access to more detailed information on the proposed treatment of and assumptions regarding out-of-state and offshore wind in the study scenarios in order to ensure an open and unconstrained vision for California's energy future.

Sincerely,

Danielle Osborn Mills  
Director, AWEA-California  
Renewable Energy Strategies, Inc.  
[danielle@renewableenergystrat.com](mailto:danielle@renewableenergystrat.com)

Molly Croll  
Offshore Wind Program Director, AWEA-California  
California Environmental Associates  
[molly@ceaconsulting.com](mailto:molly@ceaconsulting.com)