DOCKETED	
Docket Number:	19-SB-100
Project Title:	SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future
TN #:	232358
Document Title:	UCS Comments on SB100 Modeling Workshop
Description:	N/A
Filer:	System
Organization:	Mark Specht
Submitter Role:	Public
Submission Date:	3/9/2020 4:15:09 PM
Docketed Date:	3/9/2020

Comment Received From: Mark Specht Submitted On: 3/9/2020 Docket Number: 19-SB-100

UCS Comments on SB100 Modeling Workshop

Additional submitted attachment is included below.



Union of ucsusa.org Two Brattle Square, Cambridge, MA 02138-3780 t 01/.54/.5552 1 01/.804.940 1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162 500 12th Street Suite 340 Oakland CA 94607-4087 t 510.843.1872 f 510.843.3785 ucsusa.org Two Brattle Square, Cambridge, MA 02138-3780 t 617.547.5552 f 617.864.9405 500 12th Street, Suite 340, Oakland, CA 94607-4087 t 510.843.1872 f 510.843.3785 One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

March 9, 2020

California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Docket 19-SB-100 Submitted via electronic comment system

RE: Comments of the Union of Concerned Scientists on the SB 100 Modeling Inputs and Assumptions Workshop

The Union of Concerned Scientists (UCS) appreciates the opportunity to submit these comments on the SB 100 modeling inputs and assumptions workshop, conducted on February 24, 2020.

UCS thanks the California Energy Commission (CEC), California Public Utilities Commission (CPUC), and California Air Resources Board (CARB) for their leadership in crafting the first SB 100 Joint Agency Report. Before the SB 100 modeling efforts begin in earnest, UCS offers the following feedback on the CEC's proposed scenarios along with suggestions for future reliability analysis.

UCS is generally supportive of the eight proposed scenarios currently under consideration by the CEC.1 However, UCS encourages the CEC to examine more scenarios with the "All Resources Available" option. For instance, UCS strongly suggests the addition of a scenario that includes "RPS+," "High Electrification," and "All Resources Available." Such a scenario would represent the most optimistic scenario where California has high electrification loads and the greatest number of options for meeting that demand. While there is certainly value in studying the "High Electrification" option with restrictions on offshore/out-of-state wind, the CEC should also include a scenario with the "All Resources Available" option in order to understand the benefits of having both resource types available.

UCS is also concerned that the "Offshore Wind and Out-of-State Transmission Not Available" option appears to be the default Resource Availability selection across all three deep decarbonization Demand Value scenarios. This Resource Availability assumption is the most pessimistic, and UCS encourages the CEC to examine the "High Biofuels" and "High Hydrogen" scenarios with less restrictive Resource Availability assumptions. UCS recognizes that this type of modeling is time and labor intensive, so if the CEC prefers not to

¹ California Energy Commission, SB 100 Joint-agency report overview and analytical approach - Staff presentation (February 24, 2020) slide 32. Available for download at: https://www.energy.ca.gov/event/workshop/2020-02/senate-bill-100-modeling-inputs-andassumptions-workshop

add additional scenarios, UCS suggests pairing the "High Biofuels" and "High Hydrogen" options with the "All Resources Available" option instead.

Finally, looking ahead to future SB 100 planning efforts, UCS recommends that the CEC consider the use of reliability-centric modeling tools to bolster the SB 100 modeling process. UCS acknowledges the numerous workshop presentations that raise reliability as a serious concern, and UCS suggests that the CEC use a tool with stochastic modeling capabilities to address those reliability concerns in the future.

In summary, UCS recommends that the CEC:

- Study more scenarios with the "All Resources Available" option, pairing this Resource Availability option with the "High Electrification," "High Biofuels," and "High Hydrogen," Demand Value options.
- Consider the use of modeling tools better suited to studying reliability issues in future SB 100 modeling efforts.

UCS looks forward to further participation in SB 100 implementation, and we thank the CEC, CPUC, and CARB for their consideration of these comments.

Sincerely,

Mart Specto

Mark Specht Energy Analyst Union of Concerned Scientists mspecht@ucsusa.org