

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide written comments on the Clean Energy and Pollution Reduction Act Senate Bill 350 Study initiative posted on February 4, 2016.

Please submit comments to regionalintegration@caiso.com by close of business
February 19, 2016

Materials related to this study are available on the ISO website at:

<http://www.caiso.com/informed/Pages/RegionalEnergyMarket/BenefitsofaRegionalEnergyMarket.aspx>

Please use the following template to comment on the key topics addressed in the initiative proposal.

1. Do you think the proposed study framework meets the intent of the studies required by SB350? If no, what additional study areas do you believe need to be included and why?

Comment:

2. Five separate 50% renewable portfolios are being proposed for 2030 as plausible scenarios for the purpose of assessing the potential benefits of a regional market. Are these portfolios reasonable for that purpose, and if no, why?

Comment:

3. To develop the five renewable portfolios the RESOLVE model makes a number of assumptions resulting in a mix of renewable and integration resources for the scenario analysis (rooftop solar, storage, retirements, out of state resources etc.) Do you think the assumptions associated with developing the renewable portfolios are plausible? If no, why not?

There is no rationale behind the distinctions between Scenario 2 and Scenario 3. Scenario 2 makes “5,000 MW of out-of-state resources available for selection” while Scenario 3 makes “6,000 MW of additional wind...available...” SDG&E believes that there is significant amounts of available out-of-state wind development potential; at least 6,000 MW of additional wind development potential in Wyoming and New Mexico alone. Accordingly, SDG&E fails to see the value in creating a scenario that assumes less than the 6,000 MW of additional out-of-state wind development potential. SDG&E recommends that Scenario 2 be eliminated.

4. The renewable portfolio analysis assumes certain costs and locations for the various renewable technologies. Do you think the assumptions are reasonable? If no, why not?

According to the E3 presentation, “500 MW of geothermal and 500 MW of pumped storage [are] manually added for portfolio diversity.” This is in direct contradiction to other portions of the E3 presentation which state that a “least-cost combination of resources [are] selected to meet RPS targets in each period” and the RESOLVE model “selects [a] least-cost combination of resources, subject to power system constraints.” If resources are “manually added,” it is not plausible to conclude that such additions are part of a “least-cost” mix of resources. SDG&E recommends that these “manually added” resources be removed and that the RPS Calculator model and RESOLVE model be allowed to determine whether geothermal resources and pumped storage are economic additions given the parameters of the various scenarios.

<p>5. The renewable portfolio analysis makes assumptions about the availability and quantity of out-of-state renewable energy credits (“RECs”) to California. Do you think the assumptions are plausible? If no, why not?</p>
<p>Comment:</p>
<p>6. The renewable portfolio analysis makes assumptions about the ability to export surplus generation out of California (i.e., net-export assumptions). Do you think these assumptions are reasonable? If no, why not?</p>
<p>Comment: Scenario 1 assumes a “CAISO simultaneous export limit” of between 2,000 MW and 8,000 MW. Scenario 3 assumes that the “CAISO simultaneous export limit” is 8,000 MW. Power can be exported to three zones in the Western Interconnection, the “NW” (which inexplicably excludes both British Columbia and Alberta), the “SW” (which inexplicably excludes CFE) and LADWP. Perhaps an export limit of 8,000 MW is high enough that it would never bind in the studied scenarios. However, as a modeling practice, SDG&E believes creating export limits is highly arbitrary and can mask opportunities for the economical use of energy. SDG&E believes the simulation models should be allowed to use economic dispatch (reflecting hurdle rates to capture institutional barriers to trade) and physical system limitations to determine when it is economically beneficial and physically possible to export energy out of the CAISO Balancing Authority to other areas of the WECC. For this reason SDG&E recommends that the “CAISO simultaneous export limit” be removed from each of the scenarios.</p>
<p>7. Does Brattle’s approach for analysis of potential impact on California ratepayers omit any category of potential impact that should be included? If so, what else should be included?</p>
<p>Comment:</p>
<p>8. Are the methodology and assumptions to estimate the potential impact on California ratepayers reasonable? If not, please explain.</p>
<p>Comment:</p>

9. The regional market benefits will be assessed based assuming a regional market footprint comprised of the U.S. portion of the Western Interconnection. Do you believe this is a reasonable assumption for the purpose of this study? If not, please explain.

Comment: SDG&E has concerns that significant portions of the WECC are being ignored: northern Baja, Mexico; British Columbia and Alberta.

10. For the purpose of the production cost simulations, Brattle proposes to use CEC carbon price forecasts for California and TEPPC policy cases to reflect carbon policy implementation in rest of WECC. Is this a reasonable approach? If not, please explain.

Comment:

11. BEAR will be using existing economic data, and generation and transmission data from E3, the CAISO, and Brattle. These data are currently being developed. Are there specific topics that you want to be sure to be addressed regarding these data?

Comment:

<p>12. The economic analysis will focus on the electricity, transportation, and technology sectors to develop the economic estimates of employment, gross state product, personal income, enterprise income, and state tax revenue. These results will be further disaggregated by sector, occupation, and household income decile. Do you think these sectors are the appropriate ones on which to focus the job and economic impact analysis? If no, why?</p>
<p>Comment:</p>
<p>13. Under the proposed study framework, both economic and environmental impacts of disadvantaged communities will be studied. Based on the study overview do you think this satisfies the requirements of SB350?</p>
<p>Comment:</p>
<p>14. The BEAR model will evaluate direct, indirect, and induced impacts to income and jobs, including those in disadvantaged communities. Do you think additional economic analysis is required? If yes, what additional analysis is needed and why?</p>
<p>Comment:</p>
<p>15. The environmental analysis will evaluate impacts to California and the west in five areas – air quality, GHG, land, biological, and water supply. Do you think additional environmental analysis is required? If yes, what additional analysis is needed and why?</p>
<p>Comment:</p>
<p>16. The environmental analysis presentation identified a number of potential indicators for the various impacts. Are the indicators sufficient? If no, what additional indicators would you suggest?</p>
<p>Comment:</p>

17. Other

Comment: