Stakeholder Comments Template

Submitted by	Company	Date Submitted
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PPC is a non-profit trade organization that represents the common interests of approximately 100 consumer-owned electric utilities in the Northwest that are preference customers of the Bonneville Power Administration (BPA). PPC's members are both municipal and cooperative corporations, ranging from small rural distribution utilities that do not own generation to very large urban utilities that own both generation and transmission facilities. Some of PPC's members are located within the CAISO's Energy Imbalance Market footprint.

We understand the California legislature's desire to expand the CAISO and its obligation to ensure that any expansion benefits California electric consumers. Our interest is ensuring that the studies undertaken in response to SB 350 accurately represent benefits that are realistically achievable. PPC appreciates the opportunity to comment on the propose studies and their assumptions.

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?**
Comment:
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?**
Comment:
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?**
It is not clear from the presentation whether the model accounts for the need for load-serving entities external to California to use their local renewables' renewable energy credits to meet their own obligations. For example, both Oregon and Washington have and are considering increasing their renewable portfolio requirements. The model should ensure that it does not overestimate the available RECs from existing and new renewable energy development in the Northwest. We would like greater detail from E3 on its assumptions.
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?**

BPA faces oversupply of wind and hydro generation in its system primarily in, but not limited to, the spring run-off period. Under those conditions, imports of energy would exacerbate the oversupply conditions and at a minimum would have to compete with local renewable and hydro oversupply for market share. We suggest that the model should reflect the periodic oversupply and lack of a market for imports, given potential negative pricing and transmission costs.

Regarding the three export scenarios labeled 1a, 1b, and 1c, which are laid out by E3 on slide 9 of the posted presentation, we understand that the 2000 MW amount in 1a is the simultaneous historic maximum for one hour of exports from California, principally to the Northwest. Assumptions of very large export amounts to the Northwest may not be a realistic expectation if it requires that these amounts of energy can be absorbed by backing down hydro systems for a sustained period given minimum generation requirements and limited storage capability. A more detailed discussion of these assumptions would be useful.

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?

Comment:

8. Are the methodology and assumptions to estimate the potential impact on California ratepayers reasonable? If not, please explain.

Comment:

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.

PPC believes that inclusion of the entire Northwest in the CAISO footprint is not a realistic assumption for purposes of this study. BPA serves a significant amount of Northwest load and operates the majority of the region's hydro-electric generation and transmission assets in the BPA system; many Northwest public power entities own and operate large hydro-electric generation and use this to serve a significant share of Northwest load. We suggest that he model include two cases in Scenario 3: a low case with only PacifiCorp's transmission and generation assets and a high case with

the assets of PacifiCorp and the other Northwest entities that have signed agreements to participate in the EIM.

The presentations also do not make clear what "latent [Northwest] flexible capacity" the model will assume will be available and under what conditions. Much of the flexible capacity in the Northwest is dedicated to load service in the region. In the case of BPA, for example, Northwest public power entities have long-term contracts to a significant share of the energy and capacity from the federal generation assets and have a legal 'first call" on that energy and capacity in all timeframes. Although some flexible capacity could be available from federal generation, it is unclear how much capacity the model assumes can be made available from that source. E3 should explicitly recognize capacity limitations in the Northwest for integration of wind plants and provision of flexible capacity generally.

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:	

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?**
Comment:
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?**
Comment:
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?**
Comment:
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?**
Comment:
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?**
Comment:

17. Other
Comment: