

May 10, 2016
Regular Meeting
Board of Supervisors

Baseload and
Flexible Generation
Power Letter
Item #9e

May XX, 2016

The Honorable Carla Peterman, Commissioner
The Honorable Anne Simon, Administrative Law Judge
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Importance of Baseload and Flexible Generation Power to Reach a 50 Percent Renewables Portfolio Standard (SB 350, DeLeon)

Dear Commissioner Peterman and Judge Simon:

We, the undersigned County representatives, are writing to urge the Commission to ensure that baseload and flexible generation renewables provide a significant portion of the renewable power needed to meet California's 50 percent RPS. Many studies have found that diversifying California's renewables portfolio as it moves beyond 33 percent will save ratepayers money and provide greater system reliability. Increasing baseload and flexible generation renewables will provide many other benefits to ratepayers and the general public that we urge the Commission to consider as it develops the policies to go from 33 to 50 percent renewables.

1. A 50 Percent RPS Requires Greater Resource Diversity.

Numerous studies over the past few years have made clear that California needs to diversify its renewables portfolio as it goes beyond 33 percent.¹ As the Commission's own analysis has shown, integration of intermittent renewables into the grid requires significant additional costs, including backup generation, costs to stabilize the grid and more. The costs of integrating solar and wind will only increase as increasing amounts will have to be curtailed. A recent study by Energy and Environmental Economics (E3) made clear that increasing the diversity of California's renewables portfolio will reduce curtailment and provide the lowest cost option to achieve a 50 percent RPS.²

¹ See, ie, National Renewable Energy Labs, *Renewable Energy Futures*, available at: http://www.nrel.gov/analysis/re_futures/; Energy and Environmental Economics, *Investigating a Higher Renewables Portfolio Standard in California*, January 2014; Union of Concerned Scientists: *Achieving 50 Percent Renewable Electricity in California*, 2015. Available at: <http://www.ucsusa.org/sites/default/files/attach/2015/08/Achieving-50-Percent-Renewable-Electricity-In-California.pdf>.

² Id, Table 5, page 22.

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The National Renewable Energy Labs (NREL) reached the same conclusion when it considered the feasibility of the United States moving to 80 percent renewables by mid-century. Like E3, NREL found that an 80 percent RPS is feasible, but only if we significantly increase the production of baseload and flexible generation renewables.³

2. Baseload and Flexible Generation Resources Provide Many Additional Ratepayer and Public Benefits.

In addition to providing many benefits to the grid, baseload and flexible generation renewables provide many important benefits to ratepayers and the public. These benefits are particularly important in rural counties, which are some of the most economically disadvantaged in the state.

a) Geothermal Power

Geothermal power is concentrated in Imperial, Lake, Sonoma, Mono and Inyo Counties where it is an important part of the local economies. In Imperial and Lake Counties, geothermal provides the largest source of property taxes and is one of the largest sources in the other counties as well. Geothermal is a non-carbon energy source and would help meet California's GHG reduction goals. Utilizing a much smaller footprint than solar, geothermal power provides other environmental benefits such as compatibility with agricultural operations and wildlife habitat. Geothermal power also provides:

- Proven/reliable technology with over 90% capacity factor.
- Diversification of the energy portfolio to balance intermittent resources.
- Maximizes utilization of transmission resources with 2-3 times as much energy delivered per MW capacity when compared to wind or solar.
- More than 3000 permanent jobs in California.

Finally, increasing geothermal capacity in Imperial County is a critical piece of the Salton Sea restoration plan, which will protect air quality and critical wildlife habitat in Imperial and Riverside Counties.

b) Biomass

Increasing biomass power generation is critical to address the tree mortality crisis in many parts of the state. As the Governor's Emergency Proclamation makes clear, this crisis is a threat to public safety and important infrastructure, including utility infrastructure. CalFire and the Sierra Nevada Conservancy have also made clear that this is a long-term crisis and that forest biomass power is an important piece of the solution as it is the most beneficial end-use of the forest biomass that must be removed to address the Governor's Emergency Proclamation.

³ NREL, footnote 1, above.

In addition to protecting public safety – which is the Commission’s highest responsibility - forest biomass helps to protect utility infrastructure which is increasingly vulnerable to wildfire. The Valley Fire alone caused more than \$150 million in damages to utility infrastructure in Lake and Sonoma Counties. The Rim Fire and other catastrophic fires have also caused tens of millions of dollars in damage to utility infrastructure. Future fires may also threaten reservoirs and hydropower facilities.

Wildfire is also a major source of air pollution, black carbon and greenhouse gas emissions, impacts on water quality and supply and serious impacts on our local economies. Increasing forest biomass is a critical tool to protect our local communities.

Aside from helping to address the tree mortality crisis, biomass plants also have significant environmental benefits in agricultural areas. These facilities generate carbon neutral renewable energy by converting hundreds of thousands of tons of agricultural residues per year from orchard removals, tree trimmings, and prunings, which have only increased in recent years due to the severity of the drought and the need to replace more water-intensive crops.

In the absence of biomass, we could expect a sharp rise in open field burning, the impact of which is significant in communities where air quality is already a serious problem. According to the San Joaquin Valley Air Pollution Control District, one ton of almond orchard wood produces seven pounds of particulate matter when open burned. Biomass facilities can eliminate up to 95% of such emissions through the use of emission control technologies.

c) Biogas

Biogas can provide the greatest benefits to the grid because it can be used to provide flexible generation power, peak power and even energy storage. In addition, increasing biogas production can address the largest sources of methane in the state, which are dairy waste, landfills, wastewater and other organic waste. Increasing biogas production from organic waste can also help our counties to meet the state’s landfill diversion goals and reduce open field burning of agricultural waste. Biogas holds particular promise for the capture and beneficial use of dairy methane emissions in Kern, Tulare, Kings, and other counties in the San Joaquin Valley, which face significant air quality challenges. And, according to the California Air Resources Board, biogas generated from organic waste is also the only fuel that is actually carbon negative because it reduces Short-Lived Climate Pollutants (the most potent climate pollutants) and greenhouse gas emissions from fossil fuel burning.

3. Need Specific Policies to Promote Baseload and Flexible Generation Power.

We urge the Commission to adopt specific policies to increase baseload and flexible generation power. Those policies should include:

- A specific requirement or portfolio standard for baseload and flexible generation that ensures that these resources provide at least 3,500 additional megawatts of baseload and flexible generation. This could be similar to the energy storage portfolio standard to ensure that a variety of baseload and flexible generation technologies help to achieve the requirement. It will also help California prepare for the possible closure of the Diablo Canyon nuclear generating facility.
- Increase the megawatt allocation for existing biomass projects under the Governor's Emergency Proclamation.
- Make changes to the BioMAT and interconnection rules to facilitate forest biomass project development, also called for by the Emergency Proclamation.
- Allocate a portion of EPIC funding to baseload and flexible generation power to better quantify the grid, economic and environmental benefits of baseload and flexible generation power.

We thank the Commission for your consideration of these comments and look forward to working with the Commission to achieve the important benefits of baseload and flexible generation power described above.

Sincerely,

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Letter of Opposition
to AB 2395

Item #9f

ASSEMBLY BILL 2395 (LOW) – Legacy Phone Carriers

Assembly Bill 2395 (Low) seeks to establish a framework for legacy phone carriers to relinquish their decades-old obligations that guarantees customers have permanent access to basic two-way communications via a landline (usually delivered on a copper network).

The process outlined in AB 2395 is flawed and lacks critical consumer protections over affordability, quality of service, and viability of the replacement phone system. Once a legacy carrier provides notice to customers (what is the “notice” and who are the “customers?”), the carrier can submit a petition to the Public Utilities Commission to have them review whether there is an “alternative” (is that an equivalent service?). The PUC has 120 days to express their opposition to the petition or it is deemed approved. Subsequently, customers are given 90 days to offer some type of protest to the PUC. Assuming the relinquishment is made, customers have 30 days after notice to suggest to the PUC the alternative is not working, and if so, the PUC “may” order the legacy carrier to reinstate legacy service.

Questions:

1. What protections would ensure the costs of the alternative service are equivalent to what customers are paying now? Does AB 2395 ensure that the suggested alternatives are affordable?
2. Does AB 2395 ensure suggested alternatives include an equivalent or superior level of service?
3. Does AB 2395 ensure suggested alternatives will remain viable over the long-term? Two years? Five years?
4. What will other legacy phone carriers do under AB 2395?
5. Why not preclude the ability to relinquish land lines to only urban areas where fiber-optic infrastructure is already in place?
6. Would the telecom industry be willing to have Voice-over-Internet-Protocol (VoIP) subject to PUC regulation if AB 2395 were passed?
7. What unit of the population would be subject to relinquishment – census tract? Household? Line of subscribers?
8. How many petitions does the telecom industry expect in the first few weeks/months that a relinquishment petition can be submitted?

Key points:

- The presumption is for the PUC to stop a relinquishment... the presumption should be that the telcom obtain permission.
- The review process – 120-days – is far too short to determine whether relinquishment is proper and feasible.
- Customers need more than 30 days to decipher whether the alternative service works.