

August 18, 2020

Re: UM 2011 – Staff's Proposed Scope and Agenda for August 20, 2020 Workshop

To UM 2011 Service List;

NewSun Energy submits these informal comments in response to Staff's proposed scope for UM 2011 and agenda for the August 20, 2020 workshop. NewSun recommends that this docket:

- Value the cost of capacity short-falls and the value inherent in avoiding incidents where there is insufficient capacity: Recent E3 studies pointing to multi-GW capacity shortages in the Pacific Northwest, illustrate that there is a likelihood of broader market shortages and/or blackout level failures. Those will have a cost. The risk of "Californiastyle blackouts" (\$3800/MWH on Saturday) or even the \$800/MWH mid-C pricing events last year, for a low hydro market event, will have consequences to the market and ratepayers should such events unfold in Oregon. As such, NewSun recommends that this docket focus next on exploring and evaluating how the risks and costs of capacity shortages can be quantified in the capacity valuation, appropriate methodologies, and work to quantify the value of avoiding this, and thereby eventually create price signals, requirements, and standards to mitigate these costs and risks—and how these issues could impact ratepayers. In short, the Commission should understand the "cost of being wrong." See attached Recommended Questions for Capacity Shortfall Valuation. Discussing this should be added to the agenda for the August 20, 2020 workshop, re: docket direction and priorities and sequencing.
- Take a Broader Focus Beyond Just PURPA/QFs: Rather than limiting the scope of this docket to only consider capacity valuation as applicable to Public Utility Regulatory Policy Act (PURPA) projects, this docket should consider valuation methodologies that may have broader applicability across capacity needs irrespective of generation type. While Staff's concept to defer pricing capacity for energy efficiency and demand-side management has merit, the broader issue of capacity value (and cost of shortfall to ratepayers) extends beyond PURPA and QFs, and should be approached as such, so that gas, batteries, and other solutions can fully be reflected in valuation approaches. This should be incorporated in the discussion of other overall agenda and questions.

Also, as a preliminary procedural matter, the Commission opened this docket with the purpose of conducting "a general capacity investigation." Now that Staff proposes to change the scope of this docket to investigate capacity only as it relates to PURPA, the parties should discuss whether Commission approval is necessary to effectuate that shift in direction.

Order No. 19-155.

1) PURPA-Only Capacity Methodology Focus – Issues

NewSun is concerned that any methodology developed specifically for PURPA without other applicability will encourage utilities to game the inputs to that methodology so as to undervalue the capacity payments to PURPA projects. For example, under the current framework, the utilities undervalue the capacity provided by qualifying facilities by acquiring resources outside of their integrated resource plan, thus extending the time for which projects are not paid for capacity under the sufficiency period, yet the utility is acquiring more capacity. Developing a new, but different PURPA-only capacity methodology may simply equip them with a new way to game the values and continue to obstruct PURPA development in this state.

NewSun appreciates Staff's effort to focus on the application that it believes would provide the most immediate benefit and that methodologies applicable to energy efficiency or demand response may not appropriately compensate generators for their capacity value. Among other things, an appropriate methodology should value capacity even when a utility is resource sufficient, address resource procurements outside of the integrated resource plan, and should provide a 100% capacity value for projects reliably serving the time windows where there is the greatest capacity need and at a minimum. However, even if the methodology accounts for these considerations, NewSun remains concerned that the utilities will find a new way to game the inputs and undervalue PURPA capacity. As such, NewSun asks that Staff re-evaluate its decision to explore a PURPA-only capacity valuation methodology and instead further explore a methodology that can have broader applicability and that acts as an appropriate check on the utility.

2) Value of Avoiding Capacity Shortages

Finally, this docket has an opportunity to develop a methodology that accounts for the true value of capacity both in terms of new resources being added to the system, and in terms of the need for or scarcity of capacity in the market. The Northwest currently does not have sufficient capacity to meet a 2.4 hrs./yr. loss of load expectation (LOLE) standard as noted by Energy and Environmental Economics (E3) in their March 2019 study on Resource Adequacy in the Pacific Northwest.² By 2030, E3 estimates that 5 GW of net new capacity is required to maintain system reliability, 8 GW considering the 3 GW of planned coal retirements, and 16 GW if all of the coal is retired.³

California has already begun seeing rolling blackouts due to a shortage of supply (by approximately 4,400 MW) and lack of adequate planning.⁴ Hundreds of thousands experienced

Energy and Environmental Economics, Resource Adequacy in the Pacific Northwest at 36 (March 2019) available at https://static1.squarespace.com/static/5e9fc98ab8d9586057ba8496/t/5ee5303ddd4fcc4948f81a81/1592078405826/E3_NW-Resource-Adequacy_Final-March-2019.pdf. (hereafter "E3 Study").

 $^{^3}$ Id.

Dale Kasler, Rolling Blackouts Expected Today for 3.3. Million Californians, Energy Officials Warn, Sacramento Bee (Aug. 17, 2020) available at

these rolling blackouts in these last few days as wholesale prices soared (reaching \$3,800 per MWh).⁵ Given the immediate and looming capacity shortages articulated in the E3 Study, the Northwest should also be concerned about blackouts and the corresponding risk to life and property. While, NewSun understands that a utility's resource sufficiency and modeling typically take place in its individual integrated resource plan process, this docket presents an opportunity to explore this issue statewide and how all types of resources can be capitalized to, and compensated for helping address these concerns.⁶

3) Docket Schedule: Additional Workshops on Capacity Shortfall Valuation Approaches before formal docket schedule/process commences.

Given the need to still address foundational issues on capacity shortfall, including additional analytics, potential methodology approaches, and related discussion – particularly on capacity shortfall valuation, which to this point hasn't been a component of the docket process – NewSun recommends adding additional workshops and data gathering, likely including E3 support, prior to moving into the formal phase of the docket. That schedule should be revisited after that information is appropriately discussed and analyzed.

Any PURPA-specific new methodology should have the benefit of including these contributing aspects before the methodologies are changed.

4) Conclusion

NewSun appreciates the opportunity to provide this written comment and looks forward to exploring with Staff and other stakeholders whether and how a capacity valuation methodology can adequately compensate resources without utility gaming and how it can account for the risks of regional capacity shortages.

NewSun Energy

Jake Stephens

https://www.sacbee.com/news/california/article245022345.html; Paul Rogers, California Grid Operator Warned of Power shortages as State Transitioned to Clean Energy, The Mercury News (Aug. 17, 2020) available at

https://www.mercurynews.com/2020/08/17/california-blackouts-expose-problems-in-states-transition-to-clean-energy/.

Ivan Penn, California Expresses Frustration as Blackouts Enter 4th Day, The New York Times (Aug. 17, 2020) available at https://www.nytimes.com/2020/08/17/business/energy-environment/california-blackout-electric-grid.html?action=click&module=News&pgtype=Homepage.

NewSun recommends that this docket explore the question list attached hereto as Attachment A.

Attachment A

NewSun's proposed question list to explore capacity shortage concerns:

- 1. How much capacity shortfall is currently and/or projected in the market?
- 2. What is the likelihood of capacity shortfall events, over varying time periods in the next decade, including the next five years?
- 3. What are contributing factors to shortfall events occurring? What are their likelihoods?
- 4. What are current timelines to secure new capacity of varying types?
- 5. What is the cost of accelerating it? Can it be accelerated?
- 6. Are there special costs or roadblocks (such as transmission shortages) that are likely to impede the ability to acquire sufficient capacity to mitigate shortfall issues?
- 7. What is a reasonable methodology to balance, in pricing/valuing capacity shortfall, relative to the likelihood of events? (weighted averages of scenarios?)
- 8. What is the cost of a capacity shortage in the market? How much will that cost the market, the economy, and a typical ratepayer?
- 9. What other costs to the economy and life will occur if the Commission and IOUs fail to deliver sufficient capacity and blackouts occur? How will or should the Commission value those? How long to on-site mitigations measures last at key affected loads (i.e. hospitals) vs short-fall duration events?
- 10. What is the likely geographic and/or service territory overlay of market shortfalls in crisis events (of varying scales)? If not all in IOU service territories, how to address? (i.e. does a frontier hospital, in Burns, OR have same back-up generation as OHSU? Will coops experience blackouts that have human health consequences and how should OPUC consider those, re: state impacts for overall market issues.)
- 11. What other preventative measures and creative policies might mitigate these issues? (Penalties and fines to utilities? DSM programs? Direct Access expansion? Stronger PURPA policies? Battery capacity & FIT programs? Authorization of capacity payments and/or rate recovery for special limited run-rate gas units? Additional IRP reliability demonstration requirements? Resource Adequacy requirements for IOUs? Transmission policies in RFPs?)
- 12. How can a healthy PURPA policy framework and/or improvements thereto contribute to solving these issues, including battery clarity? (note that PGE's own IRP focused on acquisition of variable renewable resources and its capacity value (w/o storage) as the justification for procuring several hundred megawatts of wind).
- 13. Are there certain times of likely capacity shortfall which we should be acutely focused on valuing in order to stimulate market response?
- 14. Is there a time by which it is most urgent to ensure capacity solutions have been implemented due to the likely cost of their absence and the likelihood of such events occurring? I.e. confluence of time-compounding increased probabilities with coal retirements.

Attachment A

- 15. Does climate change affect or compound these issues and probabilities? How to approach that issue in valuation?
- 16. What are lead times on physical solutions? transmission, gas, batteries, renewables.
- 17. How does wildfire risk relate to this?
- 18. Are IOUs recent IRPs and current procurement plans sufficient to mitigate these issues?
- 19. How much gas is currently being developed in the market?
- 20. Once shortfall is priced, i.e. the value of avoiding failure, what are the costs of various solution approaches, whether carbon neutral, partially gas, or otherwise? on various timelines?