



April 26, 2021

To: Oregon Public Utility Commission

Re: Docket No. UM 2011, General Capacity Investigation

### **Reply Comments of NW Energy Coalition**

The NW Energy Coalition (NWECC) appreciates the opportunity to provide reply comments for UM 2011.

NWECC continues to support keeping the docket open to all outcomes with no predetermination of specific processes at this time. Potential procedural steps could include closing the docket with a staff report, initiating a rulemaking, developing new dockets for further implementation of findings, or any of the above.

We recommend that the docket now proceed with workshops with a view to consolidating the issues and analysis that have brought us to this point. Workshops should first address the scope and details of a method for capacity assessment with general applicability, and then focus on a framework for application of the method to the full range of regulatory contexts.

We propose the following points as potential topics for additional workshops:

**The scope of “capacity.”** Capacity can be considered the ability of resources to deliver at a specific point in time, or across all hours of the year. In addition, location as well as time can have a substantial effect on resource capacity assessment. What is the appropriate blend of these perspectives and how can that be reflected in an assessment methodology?

**Regulatory context.** There was a good initial discussion during the March 17 workshop about the range of contexts for assessment of capacity value including integrated resource plans (IRPs), new resource requests for proposals (RFPs), capacity assessment and compensation for PURPA qualifying facilities (QFs), and several more. It would be helpful to develop a complete list so that the refinement and application of a capacity assessment methodology can fully reflect those contexts.

**Preferred method for capacity assessment.** Can a single methodology suffice for capacity assessment across all types of resources and for all relevant purposes? The E3 report recommends adopting an ELCC-based methodology. That appears to have significant potential but further discussion is in order to address whether it is a good fit for all the different contexts

in which capacity assessment is needed, and how it could be improved to address overall consistency, for example in looking at storage and demand response.

In the alternative, there has been some discussion of a heuristic assessment method. Furthermore, the current trajectory of the Northwest Power Pool regional Resource Adequacy Program is to have multiple resource-specific methods for capacity assessment.

As a result, NWECC suggests it is important to take stock of the different options available and weigh their advantages and disadvantages in terms of criteria such as application across all regulatory contexts, consistency, data and runtime requirements, etc. If an ELCC-based approach is selected, this will help situate its advantages and also clarify where improvements may be needed.

**Refinement of the capacity assessment method.** There has already been productive discussion in the docket about many aspects of a robust method, especially focusing on ELCC. Without reviewing those elements in detail here, NWECC suggests a structured approach to further refinements focusing on data needs, appropriate selection of parameters and due consideration for time and location value. This discussion should proceed considering each element in turn, as well as a review of consistency and coherence across all elements.

As previously mentioned, fair and consistent capacity assessment for composite resources such as hybrids, virtual power plants and microgrids will be very important going forward. In addition, new refinements such as the Northwest Power and Conservation Council's early work on "array tables" points to opportunities for assessing ensemble value and portfolio optimization.<sup>1</sup>

**Application of the capacity assessment method.** Providing a consistent view of capacity assessment across the full range of regulatory contexts is an important though ambitious outcome. Assuring the consistent application of such a method is also important.

Capacity assessment is not merely a measurement but will have a profound effect shaping the diversity and effectiveness of the resource mix. It is important going forward to provide fair assessment to available resources as well as keeping the door open to innovative new approaches such as hybrids, virtual power plants and microgrids that can adaptively shape their operation to grid needs in ways that single resources cannot.

Next, the aim of a capacity assessment method should be to identify the full value provided by any given resource. This requires reconsideration of longstanding constructs such as Planning Reserve Margin (PRM) and Cost of New Entry (CONE).

---

<sup>1</sup> [https://www.nwccouncil.org/sites/default/files/2020\\_08\\_p4.pdf](https://www.nwccouncil.org/sites/default/files/2020_08_p4.pdf)

First, PRM is typically based on a fixed percentage, often focused on the annual peak hour. As NWECC has previously discussed, system demand peaks are quite important, but other intervals also involve system stress conditions. Since reserve sufficiency remains essential in every hour and no resource offers “perfect capacity,” a more nuanced approach to reserve margins is in order.

Second, there has already been considerable discussion of the reference or proxy resource for capacity assessment. This is often incorporated into the concept of CONE. NWECC has already expressed significant reservations about the proxy resource approach. Though this may continue to be necessary for particular purposes, a better objective is to define a more generalized system capacity metric.

Third, for some purposes the capacity assessment metric will be expressed as an economic value for resource comparison and in certain cases for compensation. An important discussion will be on the context, for example, avoided cost vs. long run incremental cost.

This concludes our reply comments. NWECC is appreciative of the effort and engagement by Staff and all participants and looks forward for further progress in this docket.

/s/

Fred Heutte  
Senior Policy Associate  
NW Energy Coalition  
fred@nwenergy.org