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VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Filing Center
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**Re: Docket No. UM 2011 – General Capacity Investigation
Idaho Power Company’s Comments**

Attention Filing Center:

Idaho Power Company (“Idaho Power” or “Company”) submits the following comments in response to Public Utility Commission of Oregon (“Commission”) Staff’s request for written comments in Docket No. UM 2011 – General Capacity Investigation. As requested by Staff, the Company’s submittal provides responses to Question Nos. 1-5, which focus on refining and narrowing the broad categories of resource attributes that might be considered capacity. The Company will provide responses to the remaining questions by the January 6, 2020, deadline established by Staff.

I. RESPONSES TO QUESTIONS

Part A. Which Resource Attributes are Appropriate to “Capacity”?

Idaho Power views capacity as a resource attribute critical to system reliability in two primary respects: (1) critical to reliably meeting peak-hour load conditions and (2) increasingly critical to balancing variable energy resources (VERs) and their effect on net load. A definition of capacity consistent with the provision of these peaking and balancing attributes is “a generating resource’s firm generation range from minimum to maximum as dispatched on demand.” This on-demand range of generation has been the traditional sense of capacity and remains a critical resource attribute for today’s grid. However, the Company recognizes that VER production, while uncontrolled, can occur at times of capacity need. Resource production occurring at times of peak-hour load conditions is of particular importance; a level of production achieved with high confidence during all peak-hour load conditions should be a valued attribute. However, the Company emphasizes that because of solar’s tendency for site-to-site intercorrelation, peak-

hour *net* load conditions during the summer season with continued solar penetration are expected to shift in time to evening hours during which solar production has become negligible; solar's contribution as a resource providing peaking capacity diminishes with expanded solar penetration.

Question No. 1: Which of these capacity definitions are applicable for which types / categories of capacity, if at all?

- a. **Nameplate capacity**
- b. **Maximum dependable capacity**
- c. **Baseload capacity**
- d. **Ability to meet energy needs**
- e. **Effective Load-Carrying Capability (ELCC)**
- f. **Peaking capacity**

Idaho Power views *peaking capacity* as the capability of a resource to contribute to serving load during high load conditions, particularly high loads occurring in association with summer heat and winter cold. Peaking capacity can be (1) dispatched generating capacity, (2) dispatched demand response, (3) a level of non-dispatched VER production occurring with a high level of certainty coincident with high load conditions, or (4) a level of non-dispatched energy efficiency savings occurring with a high level of certainty coincident with high load conditions. Idaho Power has long considered peaking capacity having one of these attributes as critical to resource adequacy as assessed for integrated resource planning and system reliability from an operational perspective.

Idaho Power views the terms *maximum dependable capacity* and *effective load-carrying capability (ELCC)* as essentially synonymous with peaking capacity. *Nameplate capacity* is simply the amount of installed capacity, and can be (especially for VERs) substantially different from the capacity attribute this docket is properly considering to be of value. A baseload resource is considered to provide peaking capacity in the sense that its steady and predictable production level occurs during effectively all hours, except when offline for maintenance, including during hours having high loads. *Baseload capacity* in this sense should be valued. A resource's *ability to meet energy needs* (part d) is not an attribute Idaho Power views as appropriately valued for this docket; for example, wind resources are recognized as energy resources (i.e., wind can contribute to meeting energy needs), not capacity resources.

Question No. 2: To what extent should flexibility and/or ability for the utility to dispatch a given resource (or resource category) be considered? In other words, should it be treated as a distinct capability or type/category of capacity, or as an enhancement to that resource's capability / capacity offering?

In integrated resource planning, flexible capacity is different from peaking capacity, and flexible capacity is becoming increasingly critical in today's world with high and expanding VER penetration. Flexible capacity is likely to become even more critical in the future with further VER expansion. In fact, Idaho Power has an integrated resource plan guideline to specifically

evaluate the need for and supply of flexible capacity – this evaluation is separate from the evaluation of need and supply for energy and peaking capacity.

Question No. 3: Similarly, how should potential ancillary services offered by a resource or resource category be considered? Do they represent a distinct category of capacity? Or an enhancement to the available capacity offered by a given resource?

The capability to provide capacity, whether it is peaking capacity or flexible capacity, is essentially considered the capability to provide ancillary services, specifically ancillary services related to regulating reserves and contingency reserves. Thus, Idaho Power believes potential ancillary services do not represent a distinct category of capacity. Related to the capability of a resource to provide capacity is the resource's ramping ability (rate at which its output can respond up or down); Idaho Power believes ramping ability should segregate different capacity providing resources.

Question No. 4: Are there distinct types of capacity that could be separately compensated, assuming that adequate information, communications and control systems are in place? For example, should capacity that has the following capabilities be considered distinctly:

- a. Available to meet system Resource Adequacy ("RA") needs?
- b. Available to meet system flexibility needs?
- c. Available in a certain time frame?
- d. Available in a certain location?

Idaho Power believes that, at least from an integrated resource plan perspective, resource adequacy needs and system flexibility needs should be considered distinctly. The Company is aligned with the concept as illustrated on Regulatory Assistance Project ("RAP") slides 19-24 from the December 2, 2019, workshop, which consider distinct system reliability needs and flexible resource needs.

Time frame is definitely a critical attribute of capacity – the availability of a resource must coincide with the arising of need. For example, VERs can experience severe down-ramps over the course of minutes, and a resource only capable of ramping up its production over the course of an hour or more, could not help with the sub-hour timeframe and thus, does not qualify as a flexible resource able to match the need for flexible capacity.

If the focus is on capacity (either system reliability or flexible resource need), then location is only marginally relevant. The capacity being focused on – bulk load-serving capacity – is important from the perspective of meeting bulk system load and bulk system net load (net load = load minus VERs).

Question No. 5: Utilities and stakeholders have already submitted a good deal of relevant information in the form of presentations and workshop participation. Staff appreciate these contributions and will continue to draw upon them and interested

parties do not need to file the same presentation materials again. However, are there other comments pertinent to the questions asked in Phases I and II (i.e. "What is Capacity," and "How do we value Capacity today?") that you would like to share with all parties, to clarify, deepen, or add nuance to your position or understanding of these issues?

The Company does not have anything further to add at this time, but looks forward to continued discussions in the next phase of this docket.

II. CONCLUSION

The Company appreciates the opportunity to provide its thoughts as the Commission conducts this investigation. As noted above, Idaho Power will provide its responses to Question Nos. 6-15 in this matter by the due date of January 6, 2020.

Sincerely,



Adam Lowney
Attorney for Idaho Power Company