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*VIA ELECTRONIC FILING*

December 16, 2019

Public Utility Commission of Oregon  
Attention: Filing Center  
201 High Street SE Suite 100  
Post Office Box 1088  
Salem, Oregon 97308-1088

**Re: UM 2011 – General Capacity Investigation, Phase III, Capacity Value  
NW Natural’s Response to Request for Written Comment**

Northwest Natural Gas Company, dba NW Natural (NW Natural or the Company), files herewith these comments in docket UM 2011 in response to Public Utility Commission of Oregon Staff’s request for written comments.

### **Background**

Staff requested utilities and stakeholders file written comments regarding a set of questions in two major sections: 1) Which Resource Attributes are Appropriate to “Capacity”?; and, 2) How Should Capacity be Valued. Staff requested comments for the first section to be filed by December 16, 2019.

NW Natural appreciates the opportunity to provide comments for Staff’s consideration. Our comments do not respond directly to each question, rather we offer our ideas on the overall process and highlight some areas that may require careful consideration.

### **Comments**

First, we want to highlight an issue that we believe could cause potential confusion regarding the use of “energy” as a synonym for “electricity”. Utility presentations cited by Staff suggest “...capacity to mean the ability to “provide energy” to meet the need...” In a broad sense, use of energy to meet customer’s needs includes natural gas, as well as electricity. When setting rules, guidelines, and policies clarity around what is being discussed is important. For this docket, any resulting approaches should bear in mind that electricity is a subset of energy.

Second, we believe the use of the term “storage” should also be clarified. It is not clear within Staff’s write-up containing questions whether storage is limited to electrical storage in the form of batteries, or if there is a more expansive definition. Other forms of storage could include pumped hydro, compressed air energy storage, as well as other innovative storage mechanisms. These methods are generally limited to producing electricity, and the timeframes for storing and dispatching can be limited in duration.

Furthermore, the current energy system in Oregon is highly dependent upon energy storage to dependably serve customers’ energy needs, with natural gas storage providing the majority of this storage (although the hydro system’s storage capabilities are also vital to aligning energy supply and demand in the region). This natural gas storage not only allows intraday balancing to

take place, but also provides longer term seasonal energy balancing compared to the technologies for storing electricity post-generation that appear to be what is being considered in this docket based on the questions put forth. Natural gas storage, which can also be used with low carbon sources of natural gas, includes both underground storage reservoirs (e.g., Mist and Jackson Prairie) that are primarily used for seasonal storage and liquefied-natural gas facilities that are large above-ground tanks used to serve peak energy needs during the coldest days in winter. Another opportunity to store energy is known as power-to-gas or P2G. With P2G excess renewable electricity can be used to run an electrolysis process that separates the hydrogen from oxygen. The hydrogen can then be used or stored in the gas system, via both underground or above-ground storage. Gas storage can be used to generate electricity, or for direct use by customers.

Third, Staff asks a question related to the capabilities of specific types of capacity and potential value. One of these types is: "Available to meet system Resource Adequacy (RA) needs?" NW Natural is aware of the broad conversations occurring within the region that discuss resource adequacy. This broader discussion recognizes the interrelated dependencies between electric and natural gas in reliably meeting the energy needs within the region. It is unclear if the question posed by Staff is requesting a broad (i.e., the whole energy sector), or narrow (i.e., electric-specific) interpretation of resource adequacy.

Lastly, NW Natural would also like to comment on the potential capacity value that distributed resources (gas or electric generators) can bring to the system. Docket UM 2030 is examining the costs and benefits associated with renewable natural gas (RNG). The current approach evaluates all benefits that resources can bring, and provides values for any avoided infrastructure costs, which will be location dependent. An on-system RNG project may delay, or avoid altogether, system reinforcements. These benefits should be incorporated in the overall project value.

NW Natural thanks Staff for this opportunity to provide comments and looks forward to continuing to actively participate in this proceeding. These comments may be supplemented as the process moves forward.

Please feel free to call should you have questions.

Sincerely,

*/s/ Rebecca T. Brown*

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