

June 30, 2020

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, Oregon 97301

RE: AR 616—PacifiCorp’s Comments on Staff’s Questions on Associated Energy Storage

PacifiCorp d/b/a Pacific Power (PacifiCorp) respectfully submits these comments in response to the Public Utility Commission of Oregon (Commission) Staff’s request for comments on June 19, 2020, in this proceeding.

- 1) What was the purpose of including ‘associated energy storage’ in the language SB 1547? What facts or policy reasons support your position?*

The term “associated energy storage” in Senate Bill 1547, codified as ORS 469A.120, reflects the unique benefits that energy storage devices can provide to an electric utility’s system as it increases reliance on renewable energy sources. The statute allows for recovery of the cost of any storage that is associated with “facilities that generate electricity from renewable energy sources.” The use of the term “associated” was purposeful and recognizes that any storage can be linked to renewable resources, and that such a pairing can provide considerable benefits as increasing levels of renewables are deployed.

As systems move toward greater renewable penetration and deeper decarbonization, storage in some form will be required to replace the inherent ability of thermal resources to increment and decrement upon an automated or manual dispatch instruction. While storage could increment or decrement to support any kind of generation, ORS 469A.120’s linkage of storage and renewables recognizes that development of the two must move in parallel to decarbonize and maintain system reliability. Therefore, all storage should be viewed as associated with facilities that generate electricity from renewable resources and its costs should be recoverable under ORS 469A.120.

- 2) Should the administrative rules require ‘associated energy storage’ to be located on the site of a renewable resource? What legal or policy reasons support your position?*

No, the administrative rules should not require “associated energy storage” to be located on the site of a renewable resource. The statute does not provide any evidence that cost recovery under 469A.120 is contingent on the location of the energy storage device; there is no requirement that the device be “collocated with” or “next to” or even “near” the renewable resource. Had the legislature intended to create a locational requirement, it could have used one of those terms. “Associated” has a broader meaning that is intended to address the benefits that

the energy storage provides to RPS-compliant resources, which is not linked in any way to location.

Further, any strict locational requirement would undercut the intent of the statute, which is to allow for cost recovery pursuant to ORS 469A.120 for energy storage devices that allow for more efficient integration of renewable energy sources. It is not the case that only collocated energy storage can provide such benefits. In fact, in many cases locating energy storage far from renewable energy sources is the most efficient way to speed development and integration of RPS-compliant resources. For example, siting energy storage near transmission constraints can allow development of resources throughout an entire region, whereas collocating a similarly sized storage device with a renewable resource might allow only for more efficient integration of that particular resource.

3) How else might energy storage be connected to a renewable energy resources?

As discussed in PacifiCorp's response to questions one and two, all storage is inherently "connected" to renewable energy resources, by nature of the benefits that storage provides as utilities deploy greater renewables. This is true regardless of the timing of a utility's acquisition of a storage resource. Like any resource, storage provides an incremental benefit to a utility's system, in effect by allowing greater and more consistent delivery of renewable generation. PacifiCorp and all of the state's other electric utilities already have portfolios that include significant renewable resources already. Flexibility of new storage resources can leverage capacity and energy available from those existing renewable resources to cover reliability gaps resulting from retiring conventional assets, and that capability should rightly be attributed to both new and existing renewable resources. This again indicates that renewable resources and storage are, in practice, associated in both planning and in operations.

Should the Commission attempt to establish a narrower definition of "associated," though, that line could theoretically be drawn at storage resources identified as part of a portfolio that includes new renewable resources. This must be the case regardless of location of those individual components so long as they contribute to the overall resource supply and the reliability of a utility's system. As a result, and at a minimum, storage resources identified and/or acquired at the same time as renewable resources should be considered "associated" with those new renewable resources. While this is a possible approach, PacifiCorp cautions that this narrower definition would inevitably leave out some storage resources that provide co-benefits with storage, regardless of the timing of the acquisition of that new storage. This outcome would be inconsistent with the statute.

Given that storage resources are uniquely suited to smooth out both the highs and lows from intermittent renewable generation that makes up the majority of projected renewable resources additions, and also further Oregon's other policies related to the reduction of emissions, it is reasonable for all storage resources to be eligible for the RAC, regardless of individual circumstances. This would in no way obviate the need for careful analysis in a company's integrated resource plan, competitive procurement, and prudent acquisition.

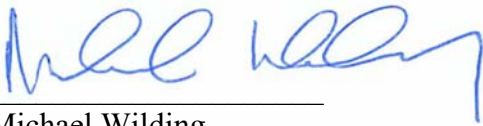
- 4) *Besides co-location, what metrics are available for determining if energy storage is associated with a renewable energy resource?*

Consistent with PacifiCorp's response to questions one and three, it would be most appropriate to conclude that all energy storage resources are associated with renewable resources. Alternately, it would be possible to link storage to renewable resources based on the timing of the acquisition of the storage.

It also may be possible to measure whether storage is associated with renewable resources based on whether a new storage resource reduces a utility's need for regulating reserves (which have traditionally been carbon-based resources), or if it reduces the utility's overall system variability (indicating that the storage is offsetting some of the inherent variability of renewables). More thought and analysis would need to be given regarding the appropriate metrics and methodologies for determining these types of benefits. If such a metric is desired, PacifiCorp suggests staff convene a technical workshop to discuss these issues.

Please contact Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934 if you have any questions.

Sincerely,



Michael Wilding
Director, Net Power Costs and Regulatory Policy