

December 3, 2019

VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Public Utility Commission of Oregon 201 High Street SE, Suite 100 Salem, OR 97301-1166

Attn: Filing Center

Re: Docket UM 1050—2020 PacifiCorp Inter-Jurisdictional Allocation Protocol

In compliance with Order No. 19-392 PacifiCorp d/b/a Pacific Power (PacifiCorp) submits for filing its Petition, the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol (2020 Protocol), Direct Testimony, and Exhibits in the above-referenced matter.

The purpose of the 2020 Protocol is to update PacifiCorp's inter-jurisdictional allocation methodology previously updated in 2015 with the Public Utility Commission of Oregon, approved by Order No. 16-319 on August 23, 2016 and extended for a third year in Order No. 17-124 issued March 29, 2017.

Please direct informal correspondence and questions regarding this filing to Cathie Allen, Manager, Regulatory Affairs, at (503) 813-5934.

Sincerely,

Etta Lockey

Vice President, Regulation

Enclosures

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1050

In the Matter of the Application of PACIFICORP for an Investigation of Inter-Jurisdictional Issues

PETITION FOR APPROVAL OF THE 2020 INTER-JURISDICTIONAL ALLOCATION PROTOCOL

Expedited Treatment Requested

PacifiCorp, d/b/a Pacific Power (PacifiCorp or company), files this Petition (Petition) under Oregon Revised Statutes (ORS) § 756.568 for approval of the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol (2020 Protocol). In support of the Petition, the company states as follows:

- Pacific Power is a division of PacifiCorp. PacifiCorp is an Oregon corporation that provides electric service to retail customers as Pacific Power in Oregon,
 California, and Washington, and as Rocky Mountain Power in Idaho, Utah, and Wyoming.
- 2. PacifiCorp is a public utility in the state of Oregon under ORS 757.005 and is subject to the Public Utility Commission of Oregon's (Commission) jurisdiction with respect to its prices and terms of electric service to retail customers in Oregon. The company serves approximately 562,000 retail customers in Oregon. PacifiCorp's principal place of business in Oregon is 825 NE Multnomah Street, Suite 2000, Portland, Oregon 97232.
- 3. The company respectfully requests that the Commission complete its review and issue an order with respect to this Petition no later than December 31, 2019, for the reasons discussed herein.

4. Communications regarding this filing should be addressed to:

Etta Lockey Vice President, Regulation PacifiCorp 825 NE Multnomah Street, Suite 2000 Portland, OR 97232 Phone: (503) 813-5701

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Matthew McVee Chief Regulatory Counsel PacifiCorp 825 NE Multnomah Street, Suite 2000 Portland, OR 97232 Phone: (503) 813-5585 matthew.mcvee@pacificorp.com

In addition, PacifiCorp requests that all data requests regarding the Petition be sent to the following:

By e-mail (preferred): <u>datarequest@pacificorp.com</u>

By regular mail: Data Request Response Center

PacifiCorp

825 NE Multnomah Street, Suite 2000

Portland, OR 97232

I. BACKGROUND

5. PacifiCorp provides retail electric service to more than 1.9 million customers in Oregon and five other western states. PacifiCorp owns substantial generation, transmission, and distribution facilities. Augmented with wholesale power purchases and long-term transmission contracts, these facilities operate as a single system on an integrated basis to provide service to all customers in a cost-effective manner. PacifiCorp recovers costs of owning and operating its generation, transmission, and distribution system in retail prices established in state regulatory proceedings.

6. On August 23, 2016, the Commission issued Order No. 16-319 adopting the 2017 Protocol. Section II of the 2017 Protocol provided the effective period and expiration date for the 2017 Protocol. On March 29, 2017, the Commission issued Order No. 17-124 granting PacifiCorp's request to extend the 2017 Protocol for a third year. Accordingly, the 2017 Protocol terminates on December 31, 2019.

II. EXPEDITED TREATMENT REQUESTED

7. PacifiCorp respectfully requests Commission approval by no later than

December 31, 2019, to allow for use of the 2020 Protocol following termination of the 2017

Protocol. Parties have negotiated the 2020 Protocol over the past several years in an attempt to reach a consensus proposal for Commission consideration through PacifiCorp's Multi
State Process. The Multi-State Process was open to all stakeholders and provided a forum for detailed discussion regarding allocations and the proposed structure of the 2020 Protocol.

III. DISCUSSION

A. Applicable Statutory Provision

8. PacifiCorp files this Application under (ORS) § 756.568.

B. Request for Approval of 2020 Protocol

9. The 2020 Protocol is intended to supersede the 2017 Protocol for California, Idaho, Oregon, Utah, and Wyoming and the West Control Area Inter-jurisdictional Allocation Methodology for Washington, while continuing to use both allocation methodologies, with modifications during an Interim Period, as explained below. Subject to the provisions of the 2020 Protocol, and with the acknowledgment that only the appropriate state body charged with issuing orders to establish rates can actually do so, the Parties have

agreed that the 2020 Protocol can be used to set just and reasonable rates and agree to support its use in rate filings in California, Idaho, Oregon, Utah, Washington, and Wyoming through the Interim Period.

- 10. The 2020 Protocol includes:
- An effective period of the 2020 Protocol, as defined in Section 2 of the agreement;
- An agreement on certain issues that are intended to be implemented during the Interim Period, "Implemented Issues";
- An agreement on certain issues intended to be implemented following the Interim
 Period, subject to final resolution of all outstanding issues identified in the 2020
 Protocol, which are referred to as "Resolved Issues";
- A process and timeframe to address and attempt to resolve all outstanding issues that the Parties intend to resolve if the 2020 Protocol is approved by the commissions and during the Interim Period, including the implementation of a Nodal Pricing Model, Resource Planning, New Resource Assignment, Limited Realignment, Special Contracts, post-Interim Period capital additions on coal plants, and other items, which are collectively referred to in the 2020 Protocol as "Framework Issues". The resolution of the Framework Issues, combined with the Implemented Issues and the Resolved Issues, are all intended to result in a new allocation methodology for PacifiCorp's six states referred to in the 2020 Protocol as the "Post-Interim Period Method";
- A description of inter-jurisdictional allocation policies, procedures, or methods which, if applied by each state as agreed to in the 2020 Protocol for rate

- proceedings filed during the Interim Period, will provide PacifiCorp a reasonable opportunity to recover its prudently incurred cost of service; and
- A description of the way costs and revenues associated with all components of PacifiCorp's regulated service, including costs and revenues associated with generation, transmission, distribution, and wholesale transactions, should be assigned or allocated among the six states.
- 11. The proposed allocation of a particular expense or investment to a state under the 2020 Protocol is not intended to and will not prejudge the prudence of those costs or the extent to which any particular cost may be reflected in rates.
- 12. Nothing in the 2020 Protocol is intended to abrogate either or both of a commission's right and its obligation to: first, determine fair, just, and reasonable rates based upon applicable laws and the record established in rate proceedings conducted by that commission; second, consider the impact of changes in laws, regulations, or circumstances on inter-jurisdictional allocation policies and procedures when determining fair, just, and reasonable rates; or third, establish different allocation policies and procedures for purposes of allocating costs and revenues within that state to different customers or customer classes.
- 13. Parties support the 2020 Protocol, but their support will not, in any manner, negate regulatory authority to address changed or unforeseen circumstances, including changes in laws or regulations. A Party's support of the 2020 Protocol will not bind or be used against that Party if a Party concludes that the 2020 Protocol no longer produces results that are just, reasonable or in the public interest, or provides the company with a reasonable opportunity to recover its prudently incurred cost of service.

- 14. The Parties have made no effort to address or consider intra-state costallocation issues and agree that using the 2020 Protocol for inter-jurisdictional cost-allocation purposes does not suggest or require similar treatment to be applied to intra-jurisdictional cost allocations for class cost of service purposes within any state.
 - 15. The 2020 Protocol also includes the following appendices:
 - Terms that are capitalized in the 2020 Protocol are defined in Appendix A.
 - Tables identifying the allocation factors to be applied to each component of PacifiCorp's revenue requirement calculation are included as Appendix B.
 - The definition and algebraic derivation of each allocation factor, along with associated Federal Energy Regulatory Commission accounts, are contained in Appendix C.
 - A Memorandum of Understanding among the Parties supporting the company's pursuit of the implementation of a Nodal Pricing Model is included as Appendix D.
 - A table reflecting currently approved depreciation lives and proposed depreciation lives in pending depreciation dockets for coal-fueled Existing Resources for reference is attached as Appendix E.
 - A Memorandum of Understanding between the company and the Washington Parties is attached as Appendix F.
 - An explanation of the treatment of special contracts for allocation purposes is attached as Appendix G.

C. Testimony and Exhibits in Support of Application

16. In support of this Application, the company provides the testimony of

Ms. Etta P. Lockey, Vice President of Regulation. Ms. Lockey's direct testimony, provided as Exhibit PAC/100, provides a summary of the 2020 Protocol and an overview of the process that led to this filing.

- 17. The direct testimony of Mr. Steven R. McDougal, Director of Revenue Requirement, provided as Exhibit PAC/200, provides details on the allocation factors in the 2020 Protocol.
- 18. Finally, direct testimony of Mr. Michael G. Wilding, Director of Net Power Costs and Regulatory Policy, provided as Exhibit PAC/300, describes the changes from the 2017 Protocol to the 2020 Protocol that affect net power costs (NPC) during the Interim Period as well as the need to track NPC differently in the future.

D. Proposed Commission Process

- 19. The 2020 Protocol has been developed and negotiated by the Parties as an integrated, interdependent whole. Support by any Party of the 2020 Protocol is expressly conditioned upon approval without material alteration of the 2020 Protocol by all commissions in the states that PacifiCorp has sought approval. The Parties recommend that the Commission approve the 2020 Protocol and that the approval be conditioned on the other commissions approving the 2020 Protocol without change.
- 20. PacifiCorp respectfully requests that the Commission approve the use of the 2020 Protocol for inter-jurisdictional cost-allocation purposes effective January 1, 2020. The company also proposes that within 30 days of receipt of the Application, the Commission establish a schedule for further proceedings.

UM 1050—PACIFICORP PETITION

¹ California has historically reviewed allocation methodologies in conjunction with a general rate case. PacifiCorp's next regulatory-mandated general rate case will not be filed until 2021 at the earliest.

IV. REQUEST FOR RELIEF

21. For the reasons described above and in the testimony and exhibits supporting this Application, PacifiCorp respectfully requests that the Commission issue an order approving the 2020 Protocol.

Respectfully submitted this 3rd day of December, 2019.

By:

Matthew D. McVee Chief Regulatory Counsel PacifiCorp d/b/a Pacific Power

CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's **2020 PacifiCorp Inter-Jurisdictional Allocation Protocol** on the parties listed below via electronic mail in compliance with OAR 860-001-0180.

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Dated this 3rd day of December, 2019.

Mary Penfield Adviser, Regulatory Operations

Docket No. UM 1050 Exhibit PAC/100 Witness: Etta P. Lockey BEFORE THE PUBLIC UTILITY COMMISSION **OF OREGON PACIFICORP Direct Testimony of Etta P. Lockey**

December 2019

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ATTACHED EXHIBITS

PAC/101—2020 PacifiCorp Inter-Jurisdictional Allocation Protocol

PAC/102—Timeline and Major Components of the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol

1		INTRODUCTION
2	Q.	Please state your name, business address and present position with PacifiCorp,
3		dba Pacific Power (the company).
4	A.	My name is Etta P. Lockey. My business address is 825 NE Multnomah Street, Suite
5		2000, Portland, Oregon 97232. My title is Vice President, Regulation for Pacific
6		Power.
7		QUALIFICATIONS
8	Q.	Please summarize your education and business experience.
9	A.	I have a Bachelor of Arts degree in Political Science from the University of Oregon
10		and a Juris Doctorate from the Northwestern School of Law of Lewis and Clark
11		College. I started at PacifiCorp as an attorney in 2013 and assumed my current role
12		as Vice President, Regulation in 2017.
13	Q.	Have you appeared as a witness in previous regulatory proceedings?
14	A.	Yes. I have testified on various matters in the states of Oregon and California.
15		PURPOSE OF TESTIMONY
16	Q.	What is the purpose of your testimony?
17	A.	My testimony describes and supports the 2020 PacifiCorp Inter-Jurisdictional
18		Allocation Protocol (2020 Protocol or Agreement) agreed to among PacifiCorp and
19		the signatories to the 2020 Protocol (referred to individually as a Party or collectively
20		as the Parties). The 2020 Protocol describes the multi-jurisdictional allocation
21		methodology that will be used through 2023, with certain exceptions if issues
22		identified in the 2020 Protocol are resolved earlier. My testimony provides an

1	overview of the process undertaken that led to this filing of the 2020 Protocol, and a
2	description of the Agreement itself. Specifically, my testimony provides:
3	• A brief history of the Multi-State Process (MSP) leading to the 2020 Protocol;
4	• A summary of the work conducted by the MSP Workgroup, since the 2017
5	Protocol, that has culminated in this filing of the 2020 Protocol;
6	• An overview of the 2020 Protocol; and,
7	• A discussion of specific issues within the 2020 Protocol.
8	Additionally, company witnesses Mr. Steven R. McDougal and Mr. Michael
9	G. Wilding provide details related to key elements of the 2020 Protocol. Specifically,
10	Mr. McDougal provides more details on the allocation factors in the 2020 Protocol,
11	the Resolved Issues, and the special contracts as a Framework Issue. Mr. McDougal
12	also addresses the following appendices of the 2020 Protocol:
13	 Appendix A—Defined terms used within the 2020 Protocol;
14	• Appendix B—Tables identifying the allocation factors to be applied to each
15	component of PacifiCorp's revenue requirement calculation during and after
16	the Interim Period;
17	Appendix C—The definition and algebraic derivation of each allocation
18	factor, along with associated Federal Energy Regulatory Commission
19	accounts;
20	• Appendix E—Commission-approved depreciation lives in effect October 1,
21	2019, and the company's proposed depreciation lives for coal-fueled resources
22	in pending depreciation dockets as filed in September 2018; and,
23	Appendix G—Treatment of Special Contracts.

1		Mr. Wilding provides details on changes in the 2020 Protocol that impact net
2		power costs (NPC), including the Nodal Pricing Model (NPM), explains the treatment
3		of qualifying facilities, and supports the Washington Memorandum of Understanding.
4		Mr. Wilding specifically addresses the following appendices of the 2020 Protocol:
5		Appendix D—The Memorandum of Understanding among the Parties
6		supporting the company's pursuit of the implementation of a NPM; and
7		• Appendix F—The Memorandum of Understanding between the company and
8		the Washington Parties.
9	Q.	Are you also sponsoring any exhibits to your testimony?
10	A.	Yes. Exhibit PAC/101 presents the 2020 Protocol. Exhibit PAC/102 depicts the
11		timeline and major components of the 2020 Protocol.
12		HISTORY OF MSP
13	Q.	Please provide an overview of the company's operations.
14	A.	PacifiCorp provides retail electric service to more than 1.9 million customers in the
15		western states of California, Idaho, Oregon, Utah, Washington, and Wyoming.
16		PacifiCorp does business as Pacific Power in California, Oregon, and Washington and
17		as Rocky Mountain Power in Idaho, Utah, and Wyoming. PacifiCorp serves
18		customers with generation, transmission, and distribution facilities located in a 10-
19		state footprint across the western United States and operates as a single system on an
20		integrated basis to provide low-cost, reliable and affordable service to customers.
21	Q.	Why is inter-jurisdictional cost allocation necessary for PacifiCorp?
22	A.	PacifiCorp recovers the costs of providing retail electric service to customers through
23		retail rates established in regulatory proceedings in each state. To ensure states

receive the appropriate allocation of costs and benefits from PacifiCorp's integrated
system, the collaborative MSP has been used to address allocation issues. This
collaborative process has led to the development and adoption of a series of interjurisdictional cost-allocation methods over time.

Q. How long have multi-state cost-allocation agreements been used by the statesand PacifiCorp?

A. Inter-jurisdictional cost-allocation methods have been used for over 30 years. They have evolved and been refined over time, with each cost-allocation method allocating to each state a portion of PacifiCorp's total system costs through a combination of both dynamic system factors and state-specific, or situs, factors.

Q. What cost-allocation method is currently being used in this state?

A. In November 2015, parties participating in the MSP agreed to an allocation method known as the 2017 Protocol. The 2017 Protocol was an agreement between PacifiCorp and certain parties, including regulatory agency staff, consumer advocates and other stakeholders in Idaho, Oregon, Utah, and Wyoming, and was approved by those commissions in 2016. The parties to the 2017 Protocol agreed to support commission adoption and use of the 2017 Protocol in all PacifiCorp rate proceedings filed after December 31, 2016, up to and including December 31, 2018. The 2017 Protocol provided for a one-year extension through December 31, 2019, which was approved by the state commissions in 2017, extending the 2017 Protocol through December 31, 2019. The company requested approval of the 2017 Protocol by the

¹ 2017 Protocol extension orders—Oregon, Docket No. UM-1050, Order No. 17-124 (March 29, 2017); Idaho, Docket No. PAC-E-17-01, Order No. 33726, Order (March 8, 2017); Utah, Docket No. 17-035-06 (March 23, 2017); Wyoming, Docket No. 20000-510-EA-17, Order No. 14644 (July 13, 2017).

1 California Public Utilities Commission in its 2018 California general rate case; a 2 decision in that case is pending. 3 Q. What have been the principal challenges to the 2017 Protocol that the MSP has 4 tried to address through the recent collaborative effort? 5 For decades, PacifiCorp has relied on cost-allocation methods that dynamically A. 6 allocate total-system costs to states. As demonstrated by nearly three decades of use, 7 the fundamental premise of the 2017 Protocol, and earlier cost-allocation protocols, 8 was durable. A bedrock of these cost-allocation protocols has been the use of 9 PacifiCorp's system as a single whole: except for distribution, all states were served 10 from a common portfolio of assets, including generation assets, which enabled 11 PacifiCorp to cost-effectively plan for and operate as an integrated whole, resulting in 12 cost savings for all customers. However, state policies across PacifiCorp's six-state 13 service territory are increasingly challenging this bedrock. For example, 14 requirements to remove coal from rates in certain states will necessarily result in 15 some states being allocated the costs and benefits of coal-fueled generation while 16 other states are not. Similarly, diverging state policies related to implementation of

20 Q. When did these challenges begin to emerge?

planning for a single, integrated system.

A. As early as 2015, the parties to the MSP were discussing these challenges. In fact, the 2017 Protocol was negotiated as an interim and time-limited cost-allocation protocol, designed to provide cost-allocation stability while allowing time for parties to the

the Public Utilities Regulatory Policy Act of 1978, retail choice, and private

generation increasingly present challenges to PacifiCorp's long-standing practice of

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1 MSP to continue to explore alternative cost-allocation protocols to better align with 2 changing state policies. 3 Q. How have the challenges of diverging state policies been addressed in MSP? 4 A. Since 2016, PacifiCorp and parties to the MSP have analyzed several cost-allocation 5 proposals. Through a robust and collaborative process, the 2020 Protocol responds to 6 diverging state policies through, among other things, a gradual process of 7 transitioning California, Oregon, and Washington from allocation of costs and 8 benefits of coal-fueled generation resources and a process to allow Idaho, Utah, and 9 Wyoming to take on additional allocation of costs and benefits. This gradual process 10 provides certainty to states that have policies requiring a transition away from coal-11 fueled generation without limiting the availability of those same resources to states 12 that wish to continue receiving costs and benefits from coal-fueled generation. 13 MSP DEVELOPMENT OF THE 2020 PROTOCOL 14 Q. Who has participated in the MSP Workgroup meetings? 15 A. Over the past three years, as many as 35 organizations have participated in regular 16 MSP meetings, representing regulatory staff from each state commission in the 17 company's service territory, consumer advocacy groups, multiple industrial and 18 environmental interest groups, state legislators, a coal supplier, and others. Meetings 19 were held every four to eight weeks since late 2016. The signatories to the 2020 20 Protocol can be found in Section 10 of the 2020 Protocol in Exhibit PAC/101. Did the company share principles to help guide the review of inter-jurisdictional 21 Q. 22 cost-allocation alternatives? 23 A. Yes, PacifiCorp developed a set of guiding principles to help evaluate development of

1		a transitional approach to cost allocations. The company's guiding principles
2		established that a new cost-allocation protocol should:
3		• Provide a long-term, durable solution;
4		 Follow cost-causation principles;
5		Minimize rate impacts at implementation;
6		• Allow for state autonomy for new resource portfolio selection;
7		Maintain and optimize system-wide benefits and joint dispatch to the extent
8		possible;
9		• Enable compliance with state policies;
10		• Ensure credit-supportive financial outcome; and,
11		• Provide the company with a reasonable opportunity to recover its costs.
12	Q.	Does the 2020 Protocol meet these requirements?
13	A.	Yes, the 2020 Protocol meets the standards articulated in PacifiCorp's guiding
14		principles.
15	Q.	The company's guiding principles reference maintaining and optimizing system
16		wide benefits. What does "benefits" mean in the context of inter-jurisdictional
17		cost allocation?
18	A.	Benefits can refer to a variety of concepts. For generation resources, benefits may
19		refer to the energy produced, NPC benefits, capacity benefits, or other operational
20		benefits the resource brings to the operation of PacifiCorp's integrated system.
21		Renewable generation resources may also contribute benefits in the form of
22		compliance with renewable portfolio standards or other reductions in compliance
23		costs associated with environmental regulations. In the context of transmission or

distribution assets, benefits may refer to access to markets and the ability to transact in the Energy Imbalance Market, voltage support, or other system or local reliability benefits. These are simply examples of the types of benefits that are referred to within the 2020 Protocol under the general term "benefits;" this list is not exhaustive and is intended only to illustrate the broad array of benefits at issue.

THE 2020 PROTOCOL

Q. Please describe the 2020 Protocol.

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The 2020 Protocol represents a fundamental shift in how the company proposes to address inter-jurisdictional cost allocation, with the ultimate goal of moving away from dynamic allocation factors and a common generation resource portfolio to a cost-allocation protocol with fixed allocation factors for generation resources and state-specific resource portfolios. To achieve this goal, the 2020 Protocol uses a gradual transition approach that relies on continuation of the 2017 Protocol—with minor modifications that I will discuss in greater detail below—during an interim period. During this interim period, from January 1, 2020, until the earlier of resolution of all remaining cost-allocation issues or December 31, 2023 (the Interim Period), the 2020 Protocol establishes: (1) cost-allocation procedures that will be implemented during the Interim Period (Implemented Issues); (2) cost-allocation procedures that are agreed to but that will not take effect until after the Interim Period (Resolved Issues); and (3) cost-allocation procedures that Parties to the 2020 Protocol will continue to work to resolve during the Interim Period (Framework Issues), including the implementation or resolution of issues surrounding a NPM, resource

1 planning, new resource assignment, limited realignment, special contracts, post-2 Interim Period capital additions on coal plants, and other items. 3 Before the end of the Interim Period, assuming resolution of all Framework 4 Issues, a new Post-Interim Period Method of cost allocation, incorporating the 5 Implemented Issues, the Resolved Issues and the final resolution of the Framework Issues, will be presented to the commissions for approval. This is anticipated to occur 6 7 no later than year-end 2023. 8 Has the company prepared an exhibit that provides a timeline for the various Q. 9 components of the 2020 Protocol? 10 A. Yes. Exhibit PAC/102 is a chart reflecting the various issues covered by the 2020 11 Protocol from 2019 to 2030. Exhibit PAC/102 is intended to provide a picture of how 12 the various elements of the 2020 Protocol interact over time, and assuming a 13 resolution of the Framework Issues, the implementation timeline that would occur for 14 the different elements. 15 Does the 2020 Protocol supersede the 2017 Protocol? Q. Yes. However, the primary elements of the 2017 Protocol are reflected in the 2020 16 A. 17 Protocol, but with certain modifications for the current situation. 18 Q. How does the company propose to use the 2020 Protocol? 19 The 2020 Protocol will be used in regulatory filings in all states beginning in 2020², A. 20 as it provides for the use of the modified West Control Area Inter-Jurisdictional 21 Allocation Methodology (WCA) in Washington as well as the modified 2017 Protocol 22 method for California, Idaho, Oregon, Utah, and Wyoming.

² The 2020 Protocol will be used in Washington beginning with a general rate case filing in December 2019.

1	Q.	Does the use of the 2020 Protocol prejudge prudence or abrogate a commission's
2		responsibility to determine prudence and just and reasonable rates?
3	A.	No. Section 1 of the Agreement makes clear that the proposed allocation of a
4		particular expense or investment to a state under the 2020 Protocol is not intended to
5		and will not prejudge the prudence of those costs or the extent to which any particular
6		cost may be reflected in rates.
7	Q.	Please provide an overview of the other sections of the 2020 Protocol.
8	A.	The rest of my testimony will walk through the key provision of Sections 2 through 9
9		of the 2020 Protocol Agreement.
10	Sectio	on 2—Timeframe and Effective Periods
11	Q.	What is the effective period of the 2020 Protocol?
12	A.	As explained above, the 2020 Protocol is designed to be used by PacifiCorp and
13		Parties for inter-jurisdictional cost allocation in regulatory proceedings or filings in
14		each state during the Interim Period, beginning in 2020.
15	Q.	Why is a four-year Interim Period necessary?
16	A.	The four-year Interim Period allows time for Parties to continue working towards
17		resolution of several remaining inter-jurisdictional issues that are identified as
18		Framework Issues in the Agreement. The Framework Issues will be critical to any
19		Post-Interim Period Method.
20	Q.	If all of the Framework Issues are resolved before the end of 2023, can the new
21		method be implemented early?
22	A.	Yes. If all of the Framework Issues are resolved early, PacifiCorp may propose that
23		each commission approve the Post-Interim Period Method for use in rate proceedings

1		either during or after the Interim Period. In the event the Post-Interim Period Method
2		is approved by December 31, 2022, the Interim Period will end on December 31,
3		2022, and PacifiCorp will use the Post-Interim Period Method for ratemaking
4		purposes beginning January 1, 2023.
5	Q.	What happens if commissions do not approve a Post-Interim Period Method or
6		if Parties are unable to reach agreement?
7	A.	If any commission does not approve the Post-Interim Period Method, PacifiCorp will
8		file an alternative proposed allocation method to take effect upon the conclusion of
9		the Interim Period for consideration by the commission in that jurisdiction. Parties
10		will be free to take any position on the company's proposal or to propose an
11		alternative method. Second, if the company determines that an agreement cannot be
12		reached by Parties on the Framework Issues or the Post-Interim Period approach,
13		then, the company will similarly file an alternative proposed allocation method for
14		consideration by the commissions and Parties will be free to take any position on the
15		company's proposal or to propose an alternative method.
16	Q.	If either the Post-Interim Period Method is denied or delayed or if no agreement
17		can be reached on the Framework Issues, when will the 2020 Protocol
18		terminate?
19	A.	The 2020 Protocol will terminate no later than December 31, 2023.
20	Section	on 3—Interim Period Allocation Method
21	Q.	How will costs be allocated during the Interim Period?
22	A.	The Parties have agreed that the states should continue to use the inter-jurisdictional
23		allocation methodologies, subject to certain exceptions, currently being used in 2019

1		For California, Idaho, Oregon, Utah, and Wyoming this means that the 2017 Protocol
2		will be extended through the Interim Period, subject to certain exceptions. Section
3		3.1 of the Agreement includes the specific terms of the 2017 Protocol that will be
4		used under the 2020 Protocol. For Washington, the WCA will continue during the
5		Interim Period, subject to the terms of Appendix F.
6	Q.	Is there explicit consideration for the treatment of NPC balancing accounts or
7		other cost recovery mechanisms?
8	A.	Yes. It is important that the allocation method used for the deferral of costs is
9		consistently applied for the collection of the costs from customers. This is key for
10		historical balancing account mechanisms for NPC. Section 3.2.1 of the 2020 Protocol
11		addresses this issue and provides that for NPC filings, PacifiCorp will use the
12		allocation methodology in place when the NPC were or will be incurred, to align the
13		timing of the actual costs incurred with the applicable allocation method for cost
14		recovery for that period. The table in Section 3.2.1 summarizes the transition period
15		between the 2017 Protocol and the 2020 Protocol for NPC filings.
16	Q.	What modifications to the 2017 Protocol are proposed in the 2020 Protocol?
17	A.	PacifiCorp proposes four modifications to the 2017 Protocol: elimination of the
18		Equalization Adjustment, changes to the Embedded Cost Differential adjustments,
19		changes to treatment of Qualifying Facilities (QFs), and changes to the general
20		governance sections of the 2017 Protocol. Changes to the general governance
21		sections are discussed later in my testimony regarding Section 8.
22	Q.	Please explain the changes to the Equalization Adjustment.
23	A.	The Equalization Adjustment addressed in Section XIV of the 2017 Protocol will

1		terminate on December 31, 2019, and no additional Equalization Adjustment amounts
2		will be deferred after that date. Collection of deferred Equalization Adjustment
3		balances and any related carrying charges, has been or will be addressed in
4		appropriate state regulatory proceedings.
5	Q.	What are the changes to the Embedded Cost Differential adjustment?
6	A.	The 2020 Protocol provides for continuation of a fixed Embedded Cost Differential
7		for Idaho and a capped dynamic Embedded Cost Differential in Oregon through the
8		end of the Interim Period. No Embedded Cost Differential adjustment exists for Utah
9		or California, and the Embedded Cost Differential adjustment will terminate in
10		Wyoming on December 31, 2020. Mr. McDougal's testimony provides additional
11		details related to the Embedded Cost Differential adjustments.
12	Q.	What are the changes to the cost allocation of QF power purchase agreements?
13	A.	In the 2017 Protocol, QF costs were system allocated, but the allocations were subject
14		to challenge if a state rejected a portion of the costs that exceeded what PacifiCorp
15		would have otherwise incurred acquiring comparable resources. The 2020 Protocol
16		modifies the treatment of QFs and provides for a transition in which current QF
17		contracts are system allocated, but future QF contracts are the responsibility of the
18		state approving them. Mr. Wilding's testimony provides a detailed description of the
19		treatment of QF contracts.
20	Q.	How are new resources treated during the Interim Period?
21	A.	New resources with a commercial operation date before January 1, 2024, will
22		continue to be treated as system resources, and assigned and allocated based on the
23		System Generation factor. New resources, including new resources contemplated in

1		the action plans of the 2019, 2021 or 2023 integrated resource plans with commercial
2		operation dates after December 31, 2023, will be assigned and allocated through the
3		new resource planning and new resource assignment processes determined through
4		resolution of the Framework Issues Workgroup during the Interim Period. The
5		Framework Issues Workgroup is made up of the signatories to the 2020 Protocol and
6		will work to resolve the Framework Issues and cooperate in crafting and filing the
7		Post-Interim Period Method.
8	Sectio	n 4—Implemented Issues
9	Q.	Will certain aspects of the 2020 Protocol be implemented during the Interim
10		Period?
11	A.	Yes, certain changes described more fully below are necessary to implement during
12		the Interim Period. These Implemented Issues are:
13		• States' decisions to exit coal-fueled existing resources;
14		Reassignment of coal-fueled existing resources;
15		Decommissioning costs; and
16		• Treatment of QFs.
17	Q.	Why is it necessary to implement these aspects of the 2020 Protocol during the
18		Interim Period?
19	A.	Changing requirements regarding the ratemaking treatment of coal in Oregon and
20		Washington is one driver for the need for a new approach to inter-jurisdictional cost
21		allocation. Even absent state mandates to remove coal from rates, differing views on
22		the longevity of coal-fueled resources has led to divergent depreciable lives for
23		PacifiCorp's coal-fueled generation units across its six states. Some states will reach

the end of their depreciable lives for certain coal-fueled generation units within five years of approval of the 2020 Protocol; some coal-fueled generation units, like Jim Bridger Unit 1, will retire within the Interim Period. In contrast to states with mandates to remove coal-fueled generation from rates, Wyoming has adopted a requirement to seek a buyer for coal-fueled generation in Wyoming once the utility decides to retire the unit.³ To accommodate these multiple, and often contradictory, state policies, a process is necessary in the near-term that allows for some states to orderly exit from coal-fueled generation, while simultaneously allowing for other states to continue to include coal-fueled generation in rates and to consider whether to increase their allocated share of the costs and benefits of coal-fueled generation. The first three Implemented Issues listed above outline the process that will be used to allow states to set a date-certain for ending any cost responsibility for or receipt of benefits from coal-fueled generation units, and the process that will be used to allow states to review whether to take on an additional share of the costs and benefits of coal-fueled generation. Critical to this process is the establishment of decommissioning cost estimates as states that exit coal-fueled generation units before the generating unit is closed are only responsible for paying estimated decommissioning and remediation costs. The process for establishing decommissioning cost estimates are described more fully in the direct testimony of Mr. McDougal.

Similar considerations drive the need to move forward with immediate changes to the treatment of cost allocation for QFs: commission-established avoided

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³ Wyo.Stat.§§37-2-133and37-3-117.

costs vary across PacifiCorp's service territory. The 2020 Protocol sets forth a transitional approach for allocating the costs of QFs to the state where the QFs are approved with full situs-allocation of QFs beginning in 2029. During the transitional period, QFs with executed contracts or legally enforceable obligations as of December 31, 2019, will continue to be system allocated. The energy output of QFs with executed contracts or legally enforceable obligations after December 31, 2019, will be system allocated based on a reasonable energy price, and any costs above the reasonable energy price will be situs assigned to the state approving the QF contract. The details of this process, including valuation and NPC impacts, are addressed in more detail in the direct testimony of Mr. Wilding.

Q. How does the 2020 Protocol address certain states' interest in exiting coal-fueled "Interim Period Resources" earlier than the company's currently anticipated operating lives?

Where possible, the 2020 Protocol seeks to put states on the same path with respect to operational lives, particularly for those coal-fueled Interim Period Resources that the company currently anticipates will close before 2030. To the extent there is a common closure date, each state that is assigned and allocated a portion of the coal-fueled Interim Period Resource at the time of its closure will continue to be allocated its share of any remaining costs, including actual decommissioning costs, accordingly. If a state issues an order to exit a coal-fueled resource on a date earlier than anticipated operational closure, the exiting state is responsible for its allocation of the coal-fueled Interim Period Resource's net plant balance and associated costs as

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⁴ Interim Period Resource means Resource in commercial operation, or with a contract delivery date, as applicable, during the Interim Period.

1 of the date of exit. The state is also responsible for accruing an allocation of 2 decommissioning costs as described in Mr. McDougal's testimony. For states where the costs and benefits of coal-fueled Interim Period Resources must be removed from 3 4 rates by a date certain, the company will propose a ratemaking treatment for all 5 allocated costs such that costs and benefits remain matched in customer rates. 6 Q. Does the 2020 Protocol establish closure dates for any Interim Period Resource 7 or change commission oversight of the company's decisions relative to the 8 operating lives of Interim Period Resources? 9 A. No. The 2020 Protocol does not mandate the closure of any resource. It establishes a 10 process for states to diverge from the use of common resources over time. The 2020 11 Protocol identifies dates when certain states expect to no longer participate in a 12 common resource, which are needed to establish key processes, but it in no way 13 affects PacifiCorp's responsibility to prudently make decisions about the operation of 14 its assets and does not limit or otherwise affect commission oversight. 15 What mechanism does the 2020 Protocol establish for those states choosing to Q. 16 exit coal-fueled Interim Period Resources before a decision by the company to 17 close the resource? 18 Section 4.1 of the 2020 Protocol outlines a process by which state commissions may A. issue "Exit Orders" which provide for specific "Exit Dates", after which the state 19

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would no longer receive any benefits or be subject to any new costs related to that

⁵ Exit Order means an order entered by a state commission approving the discontinuation of the use of an existing resource and exclusion of costs and benefits of that resource from customer rates by that state on a date certain. See Appendix A to the 2020 Protocol for the defined term as used in the 2020 Protocol.

⁶ Exit Date means the date on which PacifiCorp will discontinue the allocation and assignment of costs and benefits of a coal-fueled Interim Period Resource to the State issuing the Exit Order.

1	resource. Exit Orders may be established through the approval of the 2020 Protocol,
2	in depreciation dockets, general rate cases, or other appropriate regulatory
3	proceedings.

- Q. What actions follow the issuance of an Exit Order for a specific coal-fueled
 Interim Period Resource by one or more states?
- 6 A. An Exit Order triggers certain actions identified in the 2020 Protocol, including the 7 establishment of decommissioning cost obligations for exiting states, a potential 8 process for the determination of capital addition responsibility, and a process for the 9 consideration of reassignment of the freed up capacity to other states that have not 10 issued Exit Orders. The 2020 Protocol requests that sufficient time, at least four 11 years, is provided from the issuance of an Exit Order to the Exit Date to allow for 12 reassignment of the exiting state's share of the coal-fueled Interim Period Resource to 13 be considered by other states. The Exit Order alone does not provide for 14 reassignment, or any associated shift in responsibility for future operation and 15 maintenance or capital costs. Reassignment of costs and benefits must be approved 16 by states without Exit Orders in order for cost responsibility to shift among states and 17 for benefits of the resource to accrue to a different state.

Q. What Exit Dates does the 2020 Protocol propose, and for which states?

A. The 2020 Protocol identifies prospective Exit Dates for Oregon and Washington that
allow for compliance with state statutes regarding removal of coal-related costs and
benefits from rates. The 2020 Protocol establishes several different groupings of
coal-fueled Interim Period Resources: the first group of resources for which the
company assumes common operating lives for all states before 2030 where the states

would continue to share in the cost responsibility; the second group of resources for which the proposed Oregon Exit Dates are identified ranging from 2023 to 2027; the third group of resources for which the proposed Oregon Exit Dates are identified ranging from 2028 to 2029; fourth, the 2020 Protocol addresses the treatment of Exit Orders for Washington; and finally, it addresses a process to establish a recommendation by the company on the operating life for the Hayden units.

Q. How does the 2020 Protocol treat coal-fueled Interim Period Resources not operated by PacifiCorp?

With the exception of Hayden,⁷ the company and Oregon Parties agree to support certain Exit Dates for coal-fueled Interim Period Resources not operated by PacifiCorp, and to make best efforts to effectuate closure. If closure of a coal-fueled Interim Period Resource not operated by PacifiCorp is not effectuated by the Oregon established Exit Date, Oregon Parties will have the option to either to take an allocation and assignment of the costs and benefits of such unit for one additional year following the specified Exit Date; or discontinue taking an allocation and assignment of the costs and benefits of such unit as of the specified Exit Date. In either case, Oregon will be allocated actual decommissioning costs if closure of the unit is effectuated within such one-year period, or for Cholla Unit 4 by January 1, 2023. If closure is not within the one-year period, or January 1, 2023, for Cholla Unit 4, an estimate of decommissioning costs will need to be established.

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⁷ Hayden is a coal-fueled Interim Period Resource that is not operated by PacifiCorp. PacifiCorp will make state-specific recommendations to commissions for the treatment of Hayden Units 1 and 2 on or before February 1, 2021.

1 Q. Please address the treatment of coal-fueled Interim Period Resources for 2 Washington. 3 A. Washington's Senate Bill 5116, the Clean Energy Transformation Act (CETA), 4 requires an exit from coal-fueled Interim Period Resources by December 31, 2025. 5 The Washington Utilities and Transportation Commission's approval of the 2020 6 Protocol will constitute an Exit Order for Jim Bridger Unit 1 by December 31, 2023 7 (consistent with the 2019 Integrated Resource Plan), and for Jim Bridger Units 2 8 through 4 and Colstrip Unit 4 of no later than December 31, 2025 (consistent with 9 CETA), absent common closure dates for all states or realignment through the 10 Framework Issues process. The Framework Issues process contemplates a potential "Limited Realignment" of Interim Period Resources, such that Washington's System 11 12 Generation-Fixed (SGF) factor allocation of coal-fueled Interim Period Resources may be exchanged for other Interim Period Resources, including natural gas-fueled 13 14 Interim Period Resources. Exit Orders will only be required for the coal-fueled 15 Interim Period Resources recognized by the WCA as serving Washington customers, 16 but the Limited Realignment process will address the exchange of all Interim Period 17 Resources.

⁸ As defined in Appendix A, "Limited Realignment" means the assignment of Interim Period Resources among PacifiCorp states that different from assignment using the SGF factor.

1	Q.	How do the coal plant lives reflected in the 2020 Protocol compare to what is
2		currently approved in each state?
3	A.	Appendix E provides a table reflecting commission-approved depreciable lives in
4		effect as of October 1, 2019, and the company's proposed depreciable lives for coal-
5		fueled resources in pending depreciation dockets as filed in September 2018. This
6		Appendix is provided for informational purposes for comparison to the lives reflected
7		in Section 4.1 of the 2020 Protocol.
8	Q.	If the Public Utility Commission of Oregon (Commission) approves the 2020
9		Protocol, what does it mean in relation to the coal plant lives in pending
10		depreciation dockets?
11	A.	The company is in discussions with Parties in the pending depreciation dockets in
12		each state to recommend any modifications necessary for depreciable lives (as well as
13		decommissioning changes) for commission consideration. In Oregon, the company
14		and the Oregon Parties support the coal-fueled Interim Period Resources' lives for
15		depreciation purposes that are reflected in the 2020 Protocol.
16	Q.	Once a state issues an Exit Order, what does the 2020 Protocol contemplate for
17		next steps by the company?
18	A.	After receipt of any Exit Order, the company has the responsibility to analyze
19		whether it is reasonable to continue to operate the affected coal-fueled Interim Period
20		Resource for customers in one or more of the states without Exit Orders. PacifiCorp
21		will file its analysis and recommendations in the other states, as outlined in Section
22		4.2, Reassignment of Coal-Fueled Interim Period Resources. Based on its analysis,
23		PacifiCorp may propose reassignment of a greater share of the coal-fueled Interim

- 1 Period Resource to another state or multiple states to match state load and resource 2 balance, or propose a new Exit Date to the other states.
- 3 0. Please explain the timeline for reassignment filings.

- A. For Exit Orders received by December 15, 2020, with an Exit Date on or before 5 December 31, 2027, the company will aim to provide its analysis and 6 recommendations by February 1, 2021. For Exit Orders received by December 31, 7 2023, with an Exit Date from January 1, 2028 to December 31, 2029, the company 8 will aim to provide its analysis and recommendations by June 30, 2024. To the extent 9 possible, the company will file in all states without Exit Orders at the same time, and 10 should the company not expect to meet these filing guidelines, it will provide formal 11 notice and explanation to the Parties to the 2020 Protocol. Should additional Exit 12 Orders not specifically contemplated in the 2020 Protocol be issued, the company 13 will provide such an analysis and recommendation to the states without Exit Orders 14 within six months of receiving the Exit Order. Finally, the company will make a 15 supplementary filing in each state without Exit Orders within 60 days of the last 16 commission order. This filing will summarize each commission order, and 17 recommend a path forward consistent with all of the orders.
- 18 Q. In the event that each state with Exit Orders accepts the company's 19 recommendation that they take an additional share of capacity from a given 20 coal-fueled Interim Period Resource, such that the resource's capacity is fully 21 assigned, what would follow?
- 22 The company's supplementary filing in each state without Exit Orders will A. 23 characterize the reassignment of the capacity, along with the new Assigned

1		Production Factor percentages for that resource, as explained in Appendix C, used to
2		allocate all associated costs and benefits, consistent with the commission orders.
3		Should the various commission orders request more capacity of a given coal-fueled
4		Interim Period Resource than is available, the supplemental filing will recommend a
5		pro-rata reassignment consistent with each commission order.
6	Q.	How does the 2020 Protocol address a scenario in which states do not collectively
7		accept 100 percent of a coal-fueled Interim Period Resource that is
8		recommended for reassignment?
9	A.	In that case, the company's supplemental filing will either make a recommendation
10		on how to handle the unassigned capacity, or will make a recommendation that state
11		commissions should issue Exit Orders for the coal-fueled Interim Period Resource.
12	Section	on 5—Resolved Issues–Post-Interim Period Implementation
13	Q.	What issues have been resolved for implementation in the post-Interim Period?
	Q.	, , , , , , , , , , , , , , , , , , ,
14	A .	Pending resolution of the Framework Issues and approval of the Post-Interim Period
14		Pending resolution of the Framework Issues and approval of the Post-Interim Period
14 15		Pending resolution of the Framework Issues and approval of the Post-Interim Period Method, the following issues are Resolved Issues that will be implemented as part of
141516		Pending resolution of the Framework Issues and approval of the Post-Interim Period Method, the following issues are Resolved Issues that will be implemented as part of the Post-Interim Period Method: allocation of generation costs and fixed assignment
14151617		Pending resolution of the Framework Issues and approval of the Post-Interim Period Method, the following issues are Resolved Issues that will be implemented as part of the Post-Interim Period Method: allocation of generation costs and fixed assignment of new resources; transmission costs; distribution costs; system overhead costs;
14 15 16 17		Pending resolution of the Framework Issues and approval of the Post-Interim Period Method, the following issues are Resolved Issues that will be implemented as part of the Post-Interim Period Method: allocation of generation costs and fixed assignment of new resources; transmission costs; distribution costs; system overhead costs; administrative and general costs; other allocation issues; demand-side management;
14 15 16 17 18		Pending resolution of the Framework Issues and approval of the Post-Interim Period Method, the following issues are Resolved Issues that will be implemented as part of the Post-Interim Period Method: allocation of generation costs and fixed assignment of new resources; transmission costs; distribution costs; system overhead costs; administrative and general costs; other allocation issues; demand-side management; and state-specific initiatives. These issues represent critical components of a durable

1	Section	on 6—Framework Issues
2	Q.	What are the Framework Issues identified in the 2020 Protocol that need to be
3		resolved for the Post-Interim Period Method?
4	A.	The following Framework Issues are identified in the 2020 Protocol for continued
5		discussion during the Interim Period:
6		Resource planning and new resource assignment—long-term resource
7		planning on a total system basis while assessing state-specific resource
8		portfolio needs and the process for assignment of shares of new
9		resources by state.
10		• NPC and the NPM—treatment of NPC and the transition to the NPM.
11		• Special contracts—cost allocation treatment for special contracts.
12		Limited realignment—potential realignment of a limited portion of
13		existing coal-fueled generation and a limited number of natural gas
14		units.
15		Post-Interim capital additions—a process for determining cost
16		allocation for capital investments made in existing resources where
17		states have different Exit Dates.
18	Q.	Why do the Framework Issues require additional time to resolve?
19	A.	Most of the Framework Issues represent a significant change to the way the company
20		historically plans for its system and assigns costs and benefits. Since 2017, parties

have spent significant time discussing issues related to resource planning, new

resource assignments, allocation of NPC and the implementation of a NPM. Despite

these discussions, the complexity of these issues, combined with the potential impacts

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1		on PacifiCorp's actual operations, require additional time for the company and the
2		Parties to develop a mutually agreeable proposal. Each of the Framework Issues are
3		described in greater detail below.
4	Reso	urce Planning and new Resource Assignment
5	Q.	How does the 2020 Protocol address resource planning and new resource
6		assignment?
7	A.	The 2020 Protocol recognizes the need for a new long-term resource planning process
8		for the post-Interim Period that will need to address how to continue least-cost, least-
9		risk planning for the entirety of PacifiCorp's integrated system, while also identifying
10		individual state load and resource balances and accommodating individual state
11		policies. In addition to a new long-term resource planning process, the post-Interim
12		Period will also require a process for the determination of states' fixed share of new
13		resource acquisitions. The details of both new processes have been discussed at
14		length in MSP meetings over the last two years; however, additional time is necessary
15		to fully develop robust and durable proposals for processes that are fundamental to
16		PacifiCorp's operations.
17	Net F	Power Costs and Nodal Pricing Method
18	Q.	How does the 2020 Protocol address NPC in the post-Interim Period?
19	A.	During the post-Interim Period, states will no longer participate in a common
20		resource portfolio, and as a result, NPC will no longer be dynamically allocated. The
21		NPM, as described in the Memorandum of Understanding signed by Parties in July
22		2019 and attached as Appendix D to the 2020 Protocol, is intended to implement an
23		intra-company nodal pricing regime that allows states to pursue different portfolios,

1		while maintaining the benefits of system dispatch as much as practicable. This is a		
2	complex issue and there are still items to be resolved before the NPM can be used for			
3		ratemaking, and as such, the NPM is a Framework Issue in the 2020 Protocol. The		
4		direct testimony of Mr. Wilding addresses the NPM in greater detail.		
5	<u>Speci</u>	al Contracts		
6	Q.	How does the 2020 Protocol address special contracts?		
7	A.	As discussed more fully in the testimony of Mr. McDougal, the allocation treatment		
8		for special contracts does not change from the 2017 Protocol. For the post-Interim		
9		Period, the company has committed in the 2020 Protocol agreement as part of the		
10		Framework to continue to work in good faith with the special contract customers to		
11		develop one or more proposals for consideration by the Parties on the treatment of		
12		special contracts' loads, costs, and benefits.		
13	Q.	Does the 2020 Protocol agreement establish a timeframe to present proposals on		
14		the treatment of special contracts to the Parties to the agreement?		
15	A.	Yes. The company will make best efforts to present a proposal to Parties by		
16		September 1, 2021, with the intention of incorporating a resolution into the Post-		
17		Interim Period Method.		
18	<u>Limit</u>	ed Realignment		
19	Q.	Please explain Limited Realignment and how it applies in the Interim and post-		
20		Interim Periods?		
21	A.	Limited Realignment is a reassignment of resources among states at a point in time to		
22		address Washington's recently-enacted CETA, while appropriately valuing the		
23		exchange of rate based assets among the states. Washington's CETA requires, among		

l	other things, coal-fueled generation resources to be removed from rates by
2	December 31, 2025. The purpose of Limited Realignment is to address Washington's
3	eight percent share ⁹ of coal-fueled resources through trades with other states. CETA
1	also requires all electricity retail sales to be from non-emitting or renewable resources
5	by 2045. A Limited Realignment proposal may address natural gas-fired units in
5	addition to coal-fueled generation.

- Q. Does the 2020 Protocol provide a specific Limited Realignment proposal or timeframe for resolution of Limited Realignment?
- 9 A. No. The details of the Limited Realignment will be discussed amongst the Parties
 10 during the Interim Period.
- Q. Does the 2020 Protocol address post-Interim Period capital additions to coalfueled resources with exit dates that are different than the depreciation lives in other states?
- 14 A. Yes, as part of the Framework Issues. The 2020 Protocol includes a straw proposal to
 15 address how incremental capital investments would be treated in cost allocations for
 16 existing coal-fueled resources. The straw proposal, which Parties have agreed to
 17 evaluate but have not accepted, addresses the allocation of costs based on the timing
 18 of incremental capital in relation to a state's Exit Date. The Framework Issues
 19 Workgroup will continue to work through the details of this straw proposal during the
 20 Interim Period.

⁸ Based on a total PacifiCorp system-allocation view.

Direct Testimony of Etta P. Lockey

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3		of assets?
4	A.	Section 7 provides that the allocation of gains or losses from the sale of company-
5		owned assets will be based on the assignment of the asset at the time of the sale,
5		unless the asset has been under that assignment for less than 12 months prior to the
7		sale, in which case any gains or losses would be allocated based on the prior

How does the 2020 Protocol address the allocation of gains or losses from the sale

Section 8—Governance

assignment shares.

10 Q. What are the key governance provisions in the 2020 Protocol?

First, the 2020 Protocol establishes two workgroups: the Framework Issues

Workgroup and the MSP Workgroup. The Framework Issues Workgroup is made up

of the signatories to the 2020 Protocol and will work to resolve the Framework Issues

and cooperate in crafting and filing the Post-Interim Period Method. The MSP

Workgroup will be convened as needed by any Party to resolve an allocation issue not

specifically treated by the Framework Issues Workgroup in its limited scope.

Second, under the 2020 Protocol, holding an annual Commissioner Forum is optional and may be convened by the Parties or commissions as deemed necessary.

Third, Parties may only propose changes to the 2020 Protocol based on changed circumstances. A Party wishing to propose a change may bring a proposal to the company, which will be responsible for circulating the proposal among Parties and scheduling meetings, as needed, to resolve the issue or concern. Additionally, non-party stakeholders may likewise propose changes to or replacement of the 2020

1		Protocol; however, such proposals would first require a convening of the MSP
2		Workgroup to address such concerns.
3		Finally, Section 8.6 provides details regarding the interdependency among
4		commission approvals, establishing that any approval by a given commission is
5		contingent upon the 2020 Protocol being approved unaltered by other commissions.
6	Section	on 9—Compliance with Resource Laws
7	Q.	Please explain Section 9.
8	A.	Section 9 simply asserts PacifiCorp's determination that the 2020 Protocol complies
9		with all relevant state statutes, and should that change, the company will convene
10		either the Parties or the MSP Workgroup, as appropriate, to address the issue.
11		RECOMMENDATION
12	Q.	Please summarize the company's recommendation.
13	A.	The Parties to the 2020 Protocol have spent considerable time and effort investigating
14		inter-jurisdictional cost-allocation methodologies and approaches to respond to the
15		needs and interests of the stakeholders. The 2020 Protocol has been negotiated in
16		good faith as an integrated, interdependent agreement that balances the interests of
17		the Parties. Accordingly, PacifiCorp respectfully requests that the Commission
18		approve the 2020 Protocol, as filed. The company also requests that the Commission
19		establish a schedule that will allow for a hearing or decision as soon as practicable to
20		enable the company and Parties to reflect the 2020 Protocol in ratemaking
21		proceedings in 2020 and continue with discussions on the Framework Issues.
22	Q.	Does this conclude your direct testimony?
23	A.	Yes.

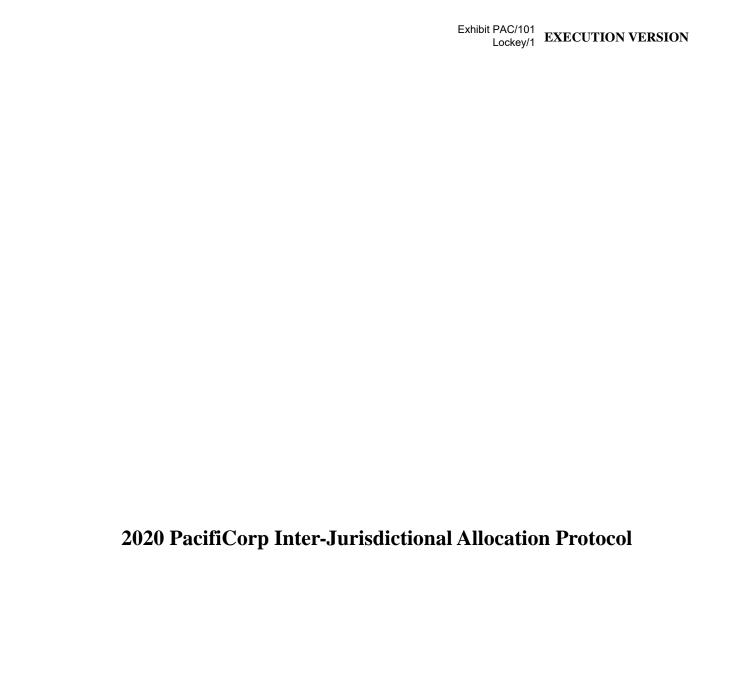
Docket No. UM 1050 Exhibit PAC/101 Witness: Etta P. Lockey

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFICORP

Exhibit Accompanying Direct Testimony of Etta P. Lockey
2020 Protocol

December 2019



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1. Introduction

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2 This 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol Agreement (the "2020 3 Protocol" or this "Agreement") reflects the agreement among PacifiCorp (or the "Company"), certain Commission¹ staff members, State regulatory agencies, customers, consumer advocates, 4 conservation organizations, and other interested parties from California, Idaho, Oregon, Utah, 5 Washington, and Wyoming (collectively referred to as the "States" or individually as a "State") 6 who have executed this Agreement (collectively referred to as the "Parties" or individually as a 7 "Party") on an interim allocation and assignment method and a process for determining a long-8 9 term replacement of existing inter-jurisdictional allocation and assignment methodologies.² The 10 2020 Protocol is intended to: (1) supersede the 2017 PacifiCorp Inter-Jurisdictional Allocation 11 Protocol (the "2017 Protocol") for California, Idaho, Oregon, Utah, and Wyoming; and (2) modify the West Control Area Inter-jurisdictional Allocation Methodology ("WCA") for Washington. 12 13 However, as part of the 2020 Protocol, the 2017 Protocol and the WCA allocation methodologies will continue to be used, with modifications explained herein, during an Interim Period, as defined 14 below. Subject to the provisions set forth below, and with the acknowledgment that only the 15 appropriate state body charged with issuing orders to establish rates can approve its use, the Parties 16 agree that the 2020 Protocol can be used to set just and reasonable rates and agree to support its 17 use in rate filings in California, Idaho, Oregon, Utah, Washington, and Wyoming during the Interim 18 Period. The 2020 Protocol includes: 19

• The allocation and assignment policies, procedures, and methods to be used during the Interim Period (i.e., January 1, 2020 through December 31, 2023, as specified

¹ Capitalized terms in the 2020 Protocol are defined herein, in Appendix A, or in Appendix C.

² For purposes of this Agreement, use of the terms assign, assignment, and assigned generally refer to the generation, capacity, benefits, and risks associated with certain assets and use of the terms allocate, allocated, allocation generally refer to the treatment of costs associated with certain assets.

in Section 2). The 2020 Protocol describes the way all components of PacifiCorp's regulated service, including costs, revenues, and benefits associated with generation, transmission, distribution, and wholesale transactions, should be allocated and assigned among the six States during the Interim Period. During the Interim Period, these inter-jurisdictional allocation policies, procedures, or methods, if applied by each State as stated herein for rate proceedings filed during the Interim Period, can provide PacifiCorp a reasonable opportunity to recover its prudently incurred cost of service.

- An agreement on certain issues that are intended to be implemented during the Interim Period and, assuming final resolution of all outstanding issues, incorporated into a Post-Interim Period Method agreement ("Implemented Issues").
- A conditional agreement on certain issues intended to be implemented following the Interim Period, subject to final resolution of all outstanding issues ("Resolved Issues").
- A process and timeframe to address and attempt to resolve all outstanding issues that the Parties intend to resolve after this 2020 Protocol has been filed with the Commissions and during the Interim Period ("Framework"), including the implementation or resolution of issues associated with a Nodal Pricing Model, Resource planning and new Resource Assignment, Limited Realignment, Special Contracts, post-Interim Period capital additions on coal-fueled Interim Period Resources and other items ("Framework Issues"). The future resolution of Framework Issues, combined with the Implemented Issues and the Resolved Issues, would result in a new allocation methodology for PacifiCorp's six States ("Post-

Interim Period Method").

The proposed allocation of a particular expense or investment to a State under the 2020 Protocol is not intended to and will not prejudge the prudence of that cost or the extent to which any particular cost may be reflected in rates. Nothing in the 2020 Protocol is intended to abrogate any Commission's right or obligation to: (1) determine fair, just, and reasonable rates based upon applicable laws and the record established in rate proceedings conducted by that Commission; (2) consider the effect of changes in laws, regulations, or circumstances on inter-jurisdictional allocation policies and procedures when determining fair, just, and reasonable rates; or (3) establish different allocation policies and procedures for purposes of allocating costs and revenues within that State to different customers or customer classes.

Parties support the 2020 Protocol, but their support will not, in any manner, affect or negate their right to address changed or unforeseen circumstances, including changes in laws or regulations. A Party's support of the 2020 Protocol will not bind or be used against that Party if a Party concludes that the 2020 Protocol no longer produces results that are just, reasonable, or in the public interest, or does not provide the Company with a reasonable opportunity to recover its prudently incurred cost of service; provided, however, that in raising an objection to the 2020 Protocol the Parties agree to first raise any such objection by following the provisions of Section 8.4.

Support of the 2020 Protocol does not constitute an acknowledgment by any Party of the validity or invalidity of any particular method, theory, or principle of regulation, cost recovery, cost of service, or rate design. No Party will be deemed to have agreed that any particular method, theory, or principle of regulation, Resource acquisition or Reassignment, cost recovery, cost of service, or rate design employed in or implied by the 2020 Protocol is appropriate for resolving

68 any issues other than the inter-jurisdictional allocation of PacifiCorp's cost of service. The Parties have made no effort to address or consider intra-state cost allocation issues and agree that using 69 the 2020 Protocol for inter-jurisdictional cost allocation purposes does not suggest or require 70 similar treatment be applied to intra-state cost allocations for class cost-of-service purposes for 71 any State. Parties may propose such methods of intra-state class cost-of-service allocations as they 72 73 deem appropriate. The 2020 Protocol includes the following appendices described briefly below: 74 Terms that are capitalized in the 2020 Protocol are defined herein, in Appendix A, 75 or in Appendix C. 76

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- Appendix B includes tables identifying the allocation factor to be applied to each component of PacifiCorp's revenue requirement calculation.
- Appendix C includes the definition and algebraic derivation of each allocation factor, along with the FERC accounts to which the allocation factor will be applied.
- Appendix D is a Memorandum of Understanding among the Parties supporting the Company's acquisition and implementation of a Nodal Pricing Model.
- Appendix E includes a table reflecting Commission-approved depreciable lives in effect October 1, 2019, and the Company's proposed depreciable lives for coalfueled Interim Period Resources in pending depreciation dockets as filed in September 2018.
- Appendix F is the Washington Inter-Jurisdictional Allocation Methodology
 Memorandum of Understanding between the Company and the Washington Parties,
 which modifies the WCA.

 Appendix G includes a description and numeric example of how Special Contracts and related issues will be treated during the Interim Period.

2. Timeframes and Effective Periods

2.1. Effective Period of the 2020 Protocol

For the Interim Period, January 1, 2020 through December 31, 2023, subject to Section 2.2.4, the Parties agree to support before their respective Commissions the use of the 2020 Protocol in PacifiCorp regulatory proceedings or filings, subject to exceptions for deferred amounts including, but not limited to, Net Power Costs as set forth in this Agreement. The 2020 Protocol includes an agreed-upon approach for cost allocations to each State that will be used by PacifiCorp in proceedings or filings commenced during the Interim Period, except as provided in Section 2.2.5.

2.2. Post-Interim Period

2.2.1. Commission Approvals for Post-Interim Period Method Obtained Prior to December 31, 2023

If each State's Commission approves a Post-Interim Period Method agreement on or before December 31, 2023, or in the first general rate case after the Post-Interim Period Method agreement is reached,³ the Interim Period will terminate on December 31, 2023, and the Post-Interim Period Method will take effect, subject to Section 2.2.2.

2.2.2. Commission Approval Not Granted

If any Commission denies PacifiCorp's request for approval of the Post-Interim Period Method agreement, PacifiCorp will propose an alternative allocation method for the Post-Interim Period for consideration by all the Commissions. Parties are free to take any position regarding

³ The Parties understand the California and Washington Commissions will likely consider the Post-Interim Period Method in the first general rate case filed in either State after an agreement has been reached on the Post-Interim Period Method, and approval may occur after December 31, 2023.

PacifiCorp's proposal, including proposing alternative allocation methodologies, filing a complaint, or requesting an investigation of PacifiCorp's proposal.

2.2.3. Post-Interim Period Method Agreement Not Reached

If the Company determines that it is unlikely that a Post-Interim Period Method agreement will be reached before the end of the Interim Period, then the Company will propose an allocation method for the Post-Interim Period for consideration by the Commissions. Parties are free to take any position regarding PacifiCorp's proposal, including proposing alternative allocation methodologies, or initiating a complaint or investigation of PacifiCorp's proposal.

2.2.4. Early Commission Approvals of Post-Interim Period Method

If a Post-Interim Period Method agreement is reached on or before December 31, 2022, any Post-Interim Period Method agreement will address whether and the degree to which the Company will use the Post-Interim Period Method in regulatory proceedings or filings commenced after December 31, 2022.

2.2.5. Regulatory Filings to Implement Post-Interim Period Method

Any Post-Interim Period Method agreement will address whether and the degree to which the Company may use the Post-Interim Period Method in regulatory proceedings or filings commenced during the Interim Period while Commission approvals of the Post-Interim Period Method agreement are pending but to be effective after the end of the Interim Period.

3. Interim Period Allocation Method

The 2017 Protocol expires December 31, 2019.⁴ The Parties representing interests in the States of California, Idaho, Oregon, Utah, and Wyoming (collectively referred to as the "Five State Parties" and the "Five States") agree that the methodology outlined in the 2017 Protocol being

⁴ As proposed in PacifiCorp's 2019 California general rate case filing, the 2017 Protocol does not expire in California on December 31, 2019.

used by the Company in 2019 should continue, as outlined and modified in Section 3, during the Interim Period while the Parties continue to negotiate the Framework Issues necessary to develop the Post-Interim Period Method. The Washington Parties agree that the methodology outlined in the WCA being used in 2019 should, subject to the terms included in Appendix F, continue during the Interim Period while the Parties continue to negotiate the Framework Issues necessary to develop the Post-Interim Period Method.

For the Five States, the terms of the 2017 Protocol that will be used during the Interim Period under the 2020 Protocol are provided in Section 3.1. The 2017 Protocol terms that are being modified by this Agreement are provided in Section 3.2.

3.1. Continuing Terms of the 2017 Protocol for the Five States Interim Period Allocation Methodology⁵

Items included in the Company's results of operations will be allocated on the factors set forth below. The FERC account and allocation factor combinations are included in Appendix B. The algebraic derivation and factor definitions are included in Appendix C.

3.1.1. Classification of Interim Period Resources

All Fixed Costs of Interim Period Resources will be classified as 75 percent Demand-Related and 25 percent Energy-Related. All Non-Firm Purchases and Sales will be classified as 100 percent Energy-Related.

3.1.2. Allocation of Interim Period Resource Costs and Wholesale Revenues

Interim Period Resources will be allocated to one of two categories for inter-jurisdictional allocation purposes: State Resources or System Resources. A complete description of allocation factors to be used is set forth in Appendix B.

⁵ Terminology in Section 3.1 has been modified from the language in the 2017 Protocol to maintain consistency in the use of terms within the 2020 Protocol.

There are three types of State Resources. The remaining types of Interim Period Resources are System Resources, which constitute the substantial majority of PacifiCorp's Resources. Benefits and costs associated with each category and type of Interim Period Resource will be assigned or allocated to States on the following basis.

3.1.2.1. Interim Period State Resources

Benefits and costs associated with the three types of State Resources will be assigned or allocated as follows:

- Demand-Side Management ("DSM") Programs: Costs associated with DSM Programs, including Class 1 DSM Programs, will be allocated on a situs basis to the State in which the investment is made. Benefits from these programs, in the form of reduced consumption and contribution to Coincident Peak, will be reflected in the Load-Based Dynamic Allocation Factors.
- Portfolio Standards: The portion of costs associated with Interim Period Resources
 acquired to comply with a State's Portfolio Standard adopted, either through
 legislative enactment or by a State's Commission, that exceed the costs PacifiCorp
 would have otherwise incurred, will be allocated on a situs basis to the Jurisdiction
 adopting the Portfolio Standard.
- <u>State-Specific Initiatives</u>: Costs and benefits associated with Interim Period Resources acquired in accordance with a State-specific initiative will be allocated and assigned on a situs basis to the State adopting the initiative. State-specific initiatives include, but are not limited to, the costs and benefits of incentive programs, net-metering tariffs, feed-in tariffs, capacity standard programs, solar

subscription programs, electric vehicle programs, and the acquisition of renewable 178 energy certificates. 179 3.1.2.2. **Interim Period System Resources** 180 All Interim Period Resources that are not State Resources are System Resources and will 181 182 be allocated as follows: Generally, all Fixed Costs associated with System Resources and all costs incurred 183 184 under Wholesale Contracts will be allocated based upon the System Generation ("SG") Factor. 185 Generally, all Variable Costs associated with System Resources will be allocated 186 based upon the System Energy ("SE") Factor. 187 Revenues received by PacifiCorp under Wholesale Contracts will be allocated 188 based upon the SG Factor. 189 3.1.3. Re-functionalization and Allocation of Transmission Costs and 190 **Revenues** 191 Before filing any request to approve a reclassification of facilities as transmission or 192 distribution with FERC, PacifiCorp will submit filings seeking review and authorization of any 193

Costs associated with transmission assets, and firm wheeling expenses and revenues, will be classified as 75 percent Demand-Related, 25 percent Energy-Related, and allocated based upon the SG Factor. Non-firm wheeling expenses and revenues will be allocated based upon the SE Factor. In the event that PacifiCorp joins a regional independent system operator, the allocation of transmission costs and revenues may be reevaluated and revised as provided for in Section 8.4.

such reclassification with the Commissions. The cost responsibility for any assets reclassified

under FERC policy will be assigned or allocated consistent with other assets in the relevant

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3.1.4. Allocation of Distribution Costs

All distribution-related expenses and investment that can be directly allocated will be directly allocated to the State where they are located. Those costs that cannot be directly allocated will be allocated consistent with the factors set forth in Appendix B.

3.1.5. Allocation of Administrative and General Costs

Administrative and General Costs, General Plant costs, and Intangible Plant costs will be allocated consistent with the factors set forth in Appendix B.

3.1.6. Allocation of Special Contracts

Revenues associated with Special Contracts will be included in State revenues, and loads of Special Contract customers will be included in Load-Based Dynamic Allocation Factors as appropriate (see Appendix G). Special Contracts may or may not include Customer Ancillary Service Contract attributes. Load curtailments and buy-through arrangements will be handled as appropriate (see Appendix G).

3.1.7 Miscellaneous Costs and Taxes

Miscellaneous costs described below will be allocated as follows:

- Generation-related dispatch costs and associated plant will be allocated on the SG Factor.
- Miscellaneous regulatory assets and liabilities, and miscellaneous deferred debits
 will be allocated with the appropriate allocation factor depending on the related
 assets or underlying costs.

Taxes and fees will be allocated as follows:

• Income taxes will be calculated using the federal tax rate and PacifiCorp's combined State effective tax rate. State-specific Schedule M and deferred income tax amounts will be allocated using the Company's tax software system. Consistent

226	with prior system allocation methods, the Washington Public Utility Tax is
227	allocated using the SO Factor in lieu of a Washington income tax.
228	• Franchise taxes, revenue related taxes, Commission assessments and fees, and
229	usage related taxes are situs or a pass through.
230	Property taxes are system allocated based on gross plant and allocated on a Gross
231	Plant System ("GPS") Factor.
232	• Generation and fuel-related taxes will be allocated using the SG Factor.
233	• Other taxes such as payroll taxes are embedded in expenses or capital costs.
234	Balances associated with the Trojan Decommissioning will be allocated using the Trojan
235	Decommissioning ("TROJD") Factor. This will not impact State-specific treatment of this item.
236	3.1.8. State Programs Regarding Access to Alternative Electricity Suppliers
237	3.1.8.1. Treatment of Oregon Direct Access Programs
238	This Section describes treatment of loads lost to Oregon Direct Access Programs during
239	the term of the 2020 Protocol.
240 241	3.1.8.1.1. Customers Electing PacifiCorp's One- and Three-Year Oregon Direct Access Programs
242	Customer loads electing to be served on PacifiCorp's one- and three-year Oregon Direct
243	Access Programs will be included in the Load-Based Dynamic Allocation Factors for all Interim
244	Period Resources, and the transition cost payments from these customers will be situs assigned
245	and allocated to Oregon.
246 247 248	3.1.8.1.2. Customers Electing PacifiCorp's Five Year Opt- Out Program Under the Oregon Direct Access Program
249	The treatment will be consistent with Order No. 15-060, as clarified through Order No. 15-
250	067, of the Oregon Public Utility Commission in Docket UE 267, and Oregon Schedule 296, which

allow Oregon Direct Access Consumers to permanently opt-out of cost-of-service rates after payment of ten years of transition costs in Oregon. If an Oregon Direct Access Consumer is paying transition costs during the Interim Period, the Oregon Direct Access Consumer's load(s) will be included in Load-Based Dynamic Allocation Factors, and the transition cost payments from these consumers will be situs-assigned to Oregon. If any Oregon Direct Access Consumer reaches the end of the 10-year period covered by the transition cost payments during the Interim Period, the load(s) for that Oregon Direct Access Consumer will be excluded from Load-Based Dynamic Allocation Factors. Thereafter, if an Oregon Direct Access Consumer elects to return to Oregon cost-of-service rates by providing four-years notice under Schedule 296, its load will be treated as new load and incorporated in PacifiCorp's Resource planning process.

3.1.8.1.3. New Laws or Regulations

To the extent Oregon adopts new laws or regulations regarding Oregon Direct Access Programs, Oregon's treatment of loads lost to Oregon Direct Access Programs may be redetermined in a manner consistent with the new laws and regulations. In the event Oregon adopts such new laws or regulations, the Company will inform the Commissions and the Parties of the same.

3.1.8.2. Utah Eligible Customer Program

If, pursuant to Utah Code Annotated Section 54-3-32, an eligible customer in Utah transfers service to a non-utility energy supplier, the Public Service Commission of Utah will make determinations under Utah law as contemplated therein. The Company will inform the Commissions and the Parties of the Public Service Commission of Utah's determinations.

3.1.8.3. Other State Actions

In the event any State adopts laws or regulations governing customer access to alternative electricity suppliers, the Company will inform the Commissions and the Parties of the same.

3.1.9. Loss or Increase in Load

Any loss or increase in retail load occurring as a result of condemnation or municipalization, sale or acquisition of new service territory that involves less than five percent of system load, realignment of service territories, changes in economic conditions, or gain or loss of large customers will be reflected in changes in the Load-Based Dynamic Allocation Factors. The allocation or assignment of costs and benefits arising from merger, sale, or acquisition transaction proposed by the Company involving more than five percent of system load will be considered on a case-by-case basis in the course of Commission approval proceedings.

3.1.10. Commission Regulation of Interim Period Resources

PacifiCorp will plan and acquire new Interim Period Resources on a system-wide risk-adjusted, least-cost basis. Prudently incurred investments in Interim Period Resources will be reflected in rates consistent with the laws and regulations in each State, as approved by individual Commissions.

3.2. Modifications to the 2017 Protocol During the Interim Period

3.2.1. Net Power Costs Filings

For Net Power Costs ("NPC") filings, Parties agree to support use of the allocation methodology in place when the NPC were or will be incurred, to align the timing of the actual costs incurred with the applicable allocation method for cost recovery for that period. The table below summarizes the transition from the 2017 Protocol to the 2020 Protocol for NPC filings. If a Post-Interim Period Method agreement is reached between the Parties, a similar table will be included to summarize the transition for NPC filings from the 2020 Protocol to the subsequent agreement.

Allocation	on Methodology Used for N	NPC Filings	
Filing	2017 Protocol	2020 Protocol	Notes
California ECAC (Balancing Rate)	2021 ECAC for the CY2020 Deferral Period	2022 ECAC for the CY2021 Deferral Period	1
California ECAC (Offset Rate)	2020 ECAC for the CY2020 Forecast Period	2021 ECAC for the CY2021 Forecast Period	1
Idaho ECAM	2020 ECAM for the CY2019 Deferral Period	2021 ECAM for the CY2020 Deferral Period	
Oregon TAM	2020 TAM for the CY2019 Forecast Period	2021 TAM for the CY2020 Forecast Period	
Oregon PCAM	2020 PCAM for the CY2019 Deferral Period	2021 PCAM for the CY2020 Deferral Period	
Utah EBA	2020 EBA for the CY2019 Deferral Period	2021 EBA for the CY2020 Deferral Period	
Washington PCAM	2019 PCAM for the CY2019 Deferral Period	2020 PCAM for the CY2020 Deferral Period	2
Wyoming ECAM	2020 ECAM for the CY2019 Deferral Period	2021 ECAM for the CY2020 Deferral Period	
Net Power Costs included in General Rate Cases (GRC) - All States Notes:		GRC with rate effective date on or after January 1, 2020	3

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This treatment will continue until the ECD is removed from base rates.

3.3.2. Embedded Cost Differential ("ECD") and Equalization Adjustment 3.3.2.1. **ECD**

The Fixed ECD will continue for Idaho through the end of the Interim Period. The Dynamic ECD for Oregon will continue through the end of the Interim Period, capped at \$11,000,000. No ECD adjustment exists for Utah or California.

The Wyoming ECD will terminate December 31, 2020. Beginning January 1, 2021, for purposes of the Wyoming energy cost adjustment mechanism ("ECAM"), actual ECD will be zero and the true-up of the Wyoming ECD will not be subject to sharing bands in the Wyoming ECAM.

^{1.} The 2020 Protocol will not be implemented in California until approved by the Commission in a general rate case. The dates included in the table are subject to change based on the California general rate case schedule, the next general rate case is currently scheduled to use a 2022 test period.

^{2.} Washington will use the modified WCA allocation methodology per Appendix F of the 2020 Protocol.

^{3.} This also applies to any other NPC filing that resets base NPC rates.

306	3.3.2.2. Equalization Adjustment
307	The Equalization Adjustment addressed in Section XIV of the 2017 Protocol will terminate
308	on December 31, 2019, and no additional Equalization Adjustment amounts will be deferred after
309	that date. The method PacifiCorp will use to collect deferred Equalization Adjustment balances
310	and any related carrying charges has been or will be addressed in appropriate State regulatory
311	proceedings.
312	3.3.3. Costs and Benefits of Qualifying Facilities
313	Costs and benefits of Qualifying Facilities will be treated consistent with the provisions
314	specified in Section 4.4.
315	3.3.4. Allocation of Gain or Loss from Sale of Assets
316	The allocation of any gain or loss from the Company's sale of assets will be treated
317	consistent with the provisions specified in Section 7.
318	3.3.5. Interpretation and Governance
319	This Agreement will be interpreted and PacifiCorp's Multi-State Process ("MSP") will be
320	governed by the provisions specified in Section 8.
321	4. Implemented Issues
322	The Parties agree that the following items, described later in this Section 4, will be
323	implemented and effective during the Interim Period:
324	• The process and timing for States' decisions to exit coal-fueled Interim Period
325	Resources;
326	• The process for potential Reassignment of coal-fueled Interim Period Resources
327	among States without Exit Orders;
328	• The process for the allocation of Decommissioning Costs; and
329	• The allocation and assignment of Qualifying Facility Power Purchase Agreements

330 ("QF PPAs").

These issues are more thoroughly explained below.

4.1. States' Decisions to Exit Coal-Fueled Interim Period Resources

PacifiCorp will continue to conduct operational and economic analyses in accordance with applicable regulatory requirements and good utility practice to maintain reliable service on a risk-adjusted, least-cost basis for its customers. PacifiCorp anticipates continuing to conduct integrated resource planning, at least biennially. PacifiCorp also anticipates continuing to undertake depreciation studies on a five-year cycle. If these analyses affect the depreciable lives or operational lives of Interim Period Resources in the future, Parties may address such effects through appropriate regulatory proceedings before the Commissions. Nothing in this Agreement affects PacifiCorp's rights and obligations to make prudent decisions regarding operation of its assets and system in accordance with applicable law. The Parties further agree that PacifiCorp's coal-fueled Interim Period Resource Closure dates may be informed by new information that becomes available as a result of other regulatory filings or actions, including integrated resource plans or State and federal energy policies. Nothing in this Agreement affects or limits any Party's ability to raise any prudence issues with regards to PacifiCorp's decisions regarding Closure of an Interim Period Resource.

Subject to the possible effects of Limited Realignment, the Parties agree to the following procedures for the Company's coal-fueled Interim Period Resources.

4.1.1. Allocation of Costs at Closure

Upon Closure of a coal-fueled Interim Period Resource, each State that is receiving benefits and is allocated costs associated with the coal-fueled Interim Period Resource at the time of Closure shall continue to be allocated its share of the remaining costs of the coal-fueled Interim

Period Resource in accordance with this 2020 Protocol, which may include the remaining net book value and Commission-approved Decommissioning Costs. The existence of an Exit Order does not change this allocation, and all States assigned benefits and allocated costs from the coal-fueled Interim Period Resource at the time of Closure will be allocated actual costs. Therefore, if every State is being assigned benefits and allocated costs from a coal-fueled Interim Period Resource at the time of Closure, every State will be allocated, in accordance with the method set forth in this Agreement, all the actual costs associated with that coal-fueled Interim Period Resource and its Closure. This can occur, for example, if every State (excepting Washington as discussed in Section 4.1.4) issues an Exit Order with the same Exit Date for a particular coal-fueled Interim Period Resource. This can also occur, for example, if PacifiCorp pursues Closure of a coal-fueled Interim Period Resource prior to a State Exit Date. No Party, by virtue of this Agreement, waives its right to investigate and analyze whether the Company's decision to continue operation or continue an ownership interest is prudent, regardless of the anticipated Closure dates in the tables in Section 4.1.3.

4.1.2 Exit Orders

The Parties, representing diverse and varied interests, have worked in good faith to create a process that allows for States to pursue differing resource portfolios in the future, including decisions to transition out of coal-fueled Interim Period Resources while mitigating resulting effects to the Company and other States. A Commission may issue an Exit Order specifying an Exit Date in a proceeding for approval of this Agreement, a depreciation docket, a rate case, or any other appropriate proceeding.⁶ A Commission Order or other determination that a coal-fueled Interim Period Resource will reach the end of its depreciable life without a specific determination

⁶ An Exit Order is not required from a Commission if a coal-fueled Interim Period Resource is not included in PacifiCorp's rates in that State.

that the State will exit the Interim Period Resource shall not constitute an Exit Order. Provided PacifiCorp secures all applicable approvals, a Company decision to close a coal-fueled Interim Period Resource earlier than previously anticipated does not require the issuance of an Exit Order. An Exit Order does not, by itself, result in Reassignment of shares of a coal-fueled Interim Period Resource to other States or affect an Exiting State's responsibility for its share of the then-remaining net book value of the Interim Period Resource that is being exited.

To provide the Company and States without Exit Orders time to consider the options and address the potential Reassignment of the coal-fueled Interim Period Resource, as set forth in Section 4.2, under this Agreement an Exit Order should provide at least four-years of notice⁷ from the date of the Exit Order to the Exit Date. After an Exit Date, the Exiting State will no longer be allocated any new costs⁸ and will no longer be assigned any benefits associated with that coal-fueled Interim Period Resource, and no other State will be allocated the Exiting State's share of costs nor receive the Exiting State's assigned benefits associated with that coal-fueled Interim Period Resource, unless the costs and benefits are accepted through a Commission Order on Reassignment. Until the Exit Date, an Exiting State shall continue to be assigned the benefits of that coal-fueled Interim Period Resource and shall be allocated costs associated with that coal-fueled Interim Period Resource in accordance with this 2020 Protocol or as determined through the Framework process, which may include costs associated with any remaining net book value, prudently incurred capital additions, prudently incurred Operations and Maintenance ("O&M") expense, and prudently incurred or reasonably estimated Decommissioning Costs.

⁷ Subject to the provisions in Sections 4.1.3 and 4.1.4.

⁸ New costs are costs incurred after the Exit Date to maintain or operate the coal-fueled Interim Period Resource beyond that date. Any costs associated with the operation of a coal-fueled Interim Period Resource and incurred prior to the Exit Date that are allocated to the Exiting State as determined through the 2020 Protocol and that have not yet been collected from customers in that State are still that State's responsibility.

An Exit Order establishes the Exit Date that PacifiCorp will use to propose the allocation of Decommissioning Costs, allocation of capital additions costs, and any other associated costs related to the exit from a coal-fueled Interim Period Resource as outlined in the 2020 Protocol. PacifiCorp will timely propose to Parties from an Exiting State a method to address the treatment of these costs for ratemaking, such that costs and benefits remain matched in customer rates.

Following receipt of an Exit Order, the Company will file in accordance with Section 4.2 to allow States without Exit Orders the opportunity to evaluate the potential Reassignment of the coal-fueled Interim Period Resource. For regulatory efficiency, Section 4.1.3 establishes timeframes for addressing Exit Orders from coal-fueled Interim Period Resources by Oregon and the potential Reassignment of those resources to other States.

4.1.3 Oregon Exit Dates

The Oregon Parties and the Company agree to recommend that the dates shown in the tables in this Section 4.1.3 be used in Oregon for service and depreciable lives, and for establishing Oregon's Exit Dates for all coal-fueled Interim Period Resources.

4.1.3.1 Coal-Fueled Interim Period Resources Not Operated by PacifiCorp Subject to Common Closure Dates, Oregon Exit 2023-2027

PacifiCorp anticipates that Cholla Unit 4, Craig Unit 1, Craig Unit 2, Colstrip Unit 3, and Colstrip Unit 4 will have common Closure dates for all States. If PacifiCorp effectuates Closure at Cholla Unit 4, Craig Unit 1, Craig Unit 2, Colstrip Unit 3, or Colstrip Unit 4 on or before the applicable dates identified in the table below, each State will be allocated its share of the costs and benefits of that coal-fueled Interim Period Resource with no transfer of cost responsibility or decommissioning liability among States, in accordance with Section 4.1.1.

PacifiCorp and the Oregon Parties agree to recommend to the Oregon Commission that the dates shown in the table below be used for establishing Oregon's Exit Dates and Oregon

depreciable lives for Cholla Unit 4, Craig Unit 1, Craig Unit 2, Colstrip Unit 3, and Colstrip Unit
421
4.

Coal-Fueled Interim Period Resource Name	Anticipated Closure Date
Cholla Unit 4	January 1, 2023
Craig Unit 1	December 31, 2025
Craig Unit 2	December 31, 2026
Colstrip Unit 3	December 31, 2027
Colstrip Unit 4	December 31, 2027

PacifiCorp and the Oregon Parties agree that PacifiCorp will make best efforts to effectuate Closure of the units identified above by the anticipated Closure dates, but the Company may need additional time for Closure of Craig Units 1 and 2 and Colstrip Units 3 and 4 due to its joint-owner agreements, and Cholla Unit 4 due to other contractual requirements.

If PacifiCorp has received an Exit Order from Oregon for Craig Unit 1, Craig Unit 2, Colstrip Unit 3, or Colstrip Unit 4 with the same Exit Date as the date set forth in the table above and PacifiCorp does not effectuate Closure by such date, Oregon may elect, at its option, to:

- Continue to take an allocation and assignment of the costs and benefits of such unit for one additional year following the specified Exit Date; or
- Discontinue taking an allocation and assignment of the costs and benefits of such unit as of the specified Exit Date.

Under either election, Oregon will continue to be subject to an allocation of actual Decommissioning Costs if Closure of the unit is effectuated within such one-year period. If Closure of the unit is not effectuated within such one-year period, Oregon will be allocated Decommissioning Costs based on the estimates established pursuant to Section 4.3.

Oregon will be allocated actual Decommissioning Costs if Closure of Cholla Unit 4 occurs on or before January 1, 2023. If Cholla Unit 4 operates beyond January 1, 2023, Oregon will be allocated only estimated Decommissioning Costs as of January 1, 2023.

4.1.3.2. Coal-Fueled Interim Period Resources Operated by PacifiCorp, Oregon Exit Through 2027

The Oregon Parties and the Company agree to recommend to the Oregon Commission that the Exit Date for each coal-fueled Interim Period Resource shown in the following table should be used in Oregon for establishing Oregon's Exit Dates and Oregon depreciable lives for these coal-fueled Interim Period Resources, subject to the other provisions of this Section 4.1.

Coal-Fueled Interim Period Resource	Recommended Oregon Exit Date
Jim Bridger 1	December 31, 2023
Jim Bridger 2	December 31, 2025
Jim Bridger 3	December 31, 2025
Jim Bridger 4	December 31, 2025
Naughton 1	December 31, 2025
Naughton 2	December 31, 2025
Dave Johnston 1	December 31, 2027
Dave Johnston 2	December 31, 2027
Dave Johnston 3	December 31, 2027
Dave Johnston 4	December 31, 2027

Oregon Parties and the Company will strive to have Exit Orders issued on or before December 15, 2020, for the coal-fueled Interim Period Resources reflected in the table above to allow the Company to make filings in the other States in accordance with Section 4.2. If PacifiCorp effectuates Closure for any of the units no later than the dates in the table above, then the provisions of 4.1.1 will apply.

4.1.3.3. Coal-Fueled Interim Period Resources, Oregon Exit Date 2028 - 2029

The Oregon Parties and the Company agree that the recommended Exit Dates for the coal-fueled Interim Period Resources shown in the following table should be used in Oregon for establishing Oregon's Exit Dates and Oregon depreciable lives for these coal-fueled Interim Period Resources for purposes of this Agreement, subject to the other provisions of this Section 4.1.

Coal-Fueled Interim Period Resource Name	Recommended Oregon Exit Date
Hunter 1	December 31, 2029
Hunter 2	December 31, 2029
Hunter 3	December 31, 2029
Huntington 1	December 31, 2029
Huntington 2	December 31, 2029
Wyodak	December 31, 2029

Oregon Parties and the Company will strive to have Exit Orders issued by the Oregon Commission issued by December 31, 2023, for the coal-fueled Interim Period Resources reflected in the table above to allow the Company to make the necessary filings in other States in accordance with Section 4.2. If PacifiCorp effectuates Closure for any of the units no later than the dates in the table above, then the provisions of 4.1.1 will apply.

4.1.4. Washington Exit Orders

The Washington Clean Energy Transformation Act ("CETA") requires coal-fueled Interim Period Resources to be out of Washington rates by December 31, 2025. Section 6.4 of the Framework Issues addressing Limited Realignment is intended to facilitate the removal of coal-fueled Interim Period Resources from Washington rates and address the Washington-allocated share, per the System Generation-Fixed ("SGF") Factor, as defined in Appendix C, of all coal-fueled Interim Period Resources whether or not those resources are included in Washington rates.

Washington Commission approval of the 2020 Protocol will constitute an Exit Order for

Washington, unless modified by Reassignment or Limited Realignment, with an Exit Date of December 31, 2023, for Jim Bridger Unit 1, and December 31, 2025, for Jim Bridger Units 2-4 and Colstrip Unit 4. PacifiCorp and the Washington Parties agree that an Exit Order is not required from the Washington Utilities and Transportation Commission for any coal-fueled Interim Period Resources not currently in Washington rates, and PacifiCorp can evaluate seeking Reassignment upon approval of the 2020 Protocol by the Washington Commission.

4.1.5. Establishment of Exit Dates for Hayden Units 1 and 2

On or before February 1, 2021, the Company will make State-specific recommendations to Commissions for the treatment of Hayden Units 1 and 2. If PacifiCorp effectuates Closure for Hayden Units 1 and 2, then the provisions of 4.1.1 will apply, subject to applicable legal requirements.

4.2. Reassignment of Coal-Fueled Interim Period Resources

4.2.1 Company Proposals for Reassignment

After receipt of any Exit Order, PacifiCorp shall analyze whether it is reasonable to continue to operate the affected coal-fueled Interim Period Resource for customers in one or more of the States without Exit Orders. PacifiCorp may propose Reassignment of a greater share of the coal-fueled Interim Period Resource to such State(s) to match State load and resource balance, or request issuance of an Exit Order. PacifiCorp shall provide its analysis to Parties in each applicable State and may make a filing with the Commission in each State that, as yet, has not entered an Exit Order for such coal-fueled Interim Period Resource consistent with the timeframes set forth in Sections 4.1 and this Section. If PacifiCorp seeks Reassignment, the analysis shall be accompanied by recommendations as to an anticipated Closure date if Reassignment is accepted

⁹ Provided PacifiCorp secures all applicable approvals, PacifiCorp may effectuate Closure of a Resource without requesting issuance of any Exit Order.

for such coal-fueled Interim Period Resource. Recommended Reassignments, if proposed, should include a range of options, including fallback options based on the potential that one Commission may reject PacifiCorp's recommendation while another Commission may accept the primary recommendation. Notwithstanding this Section 4.2.1, realignment of certain Interim Period Resources serving Washington will be determined subject to resolution of the Limited Realignment Framework Issue or Section 4.1.4 as applicable.

4.2.2 Process and Timing

Consistent with Section 4.1, for those coal-fueled Interim Period Resources, with an Exit Date on or before December 31, 2027, the filings including the Company's analysis and recommendations are targeted to occur by February 1, 2021. For those coal-fueled Interim Period Resources with an Exit Date after December 31, 2027, and on or before December 31, 2029, the filings including the Company's analysis and recommendations are targeted to occur by June 30, 2024, for Exit Orders that are received by December 31, 2023. Where possible, PacifiCorp will make such filings concurrently in each State without an Exit Order so that each unit or plant can be analyzed as a whole. To the extent a delay to these targeted filing dates is necessary, the Company will provide notice to the Parties and Commissions explaining the reason and expected filing dates. For coal-fueled Interim Period Resources with Exit Orders with different Exit Dates, the Company will provide its analysis to the States without Exit Orders within six months after the date any Exit Order is issued by any Commission, subject to the provisions of Section 4.1.4 for the Washington Exit Orders.

If PacifiCorp makes filings pursuant to this Section in multiple States without Exit Orders, then within 60 days from the date the last Commission issues an order pertaining to such filings, PacifiCorp will submit a supplemental filing with each Commission in the State(s) without Exit

Orders summarizing the decisions made by each Commission and PacifiCorp's recommendations regarding the implications.

4.2.3 Effects of Commission Decisions Regarding Assignment

If one or more Commissions have entered orders accepting, collectively, one-hundred percent ¹⁰ of the cost allocation of a coal-fueled Interim Period Resource beyond any Exit Date, the costs and benefits of the coal-fueled Interim Period Resource after such Exit Date shall be Reassigned to the States in accordance with the approved Reassignment as specified in the applicable Commission Orders. Supplemental filings will reflect the final Reassignment of each coal-fueled Interim Period Resource as a result of the Reassignment process and Commission Orders.

If two or more Commissions have entered orders requesting, collectively, more than one-hundred percent¹¹ of the cost allocation and associated benefits of a coal-fueled Interim Period Resource beyond any Exit Date, the Company will recommend a pro-rata Reassignment up to one hundred percent in accordance with the approved Reassignment as specified in the applicable Commission Orders. Supplemental filings will reflect this pro-rata treatment of each coal-fueled Interim Period Resource as a result of the pro-rata Reassignment process for further review and approval by the Commissions.

If Commissions do not agree to accept one-hundred percent cost allocation, collectively, of a coal-fueled Interim Period Resource beyond an Exit Date, as part of its supplemental filings, the Company will provide its recommendations on the treatment of any shortfall in the Reassignment

¹⁰ Based on PacifiCorp's ownership interest in the coal-fueled Interim Resource, whether wholly-owned or jointly-owned.

¹¹ Based on PacifiCorp's ownership interest in the coal-fueled Interim Resource, whether wholly-owned or jointly-owned.

of a coal-fueled Interim Period Resource or recommendations on capacity reductions through Closures for further Commission consideration.

In the event of either common Exit Dates for all States or Closure as a result of the Reassignment process or other appropriate regulatory proceedings, the provisions of Section 4.1.1 will apply.

4.3. Decommissioning Costs

4.3.1. Process for Determining Decommissioning Cost Allocation

4.3.1.1. Decommissioning Studies

The Company intends to undertake a contractor-assisted engineering study of decommissioning costs and to make best efforts to complete the study by January 15, 2020, to estimate appropriate Decommissioning Cost reserve requirements for the Jim Bridger, Dave Johnston, Hunter, Huntington, Naughton, Wyodak, and Hayden coal-fueled Interim Period Resources. Colstrip will also be included in the contractor-assisted engineering study of decommissioning costs, and the Company will make best efforts to complete that portion of the study by March 15, 2020. The Company will provide the information from the study to the States as a supplemental filing in all applicable depreciation dockets. The study results will be used to inform the Company's recommendation on the amount of Decommissioning Cost responsibility to be allocated to States for coal-fueled Interim Period Resources that States exit at different times. The Company will retain and make available the Decommissioning Studies in future regulatory proceedings.

4.3.1.2. Decommissioning Studies Update

The Company intends to undertake the same process to complete an update to the Decommissioning Studies by no later than June 30, 2024, to estimate appropriate Decommissioning Cost reserve requirements for the Craig, Hunter, Huntington, and Wyodak coal-

fueled Interim Period Resources (collectively with the studies discussed in the paragraph above constituting the Decommissioning Studies), which will be incorporated into a Company-sponsored depreciation study. The Company will retain and make available the Decommissioning Studies update in future regulatory proceedings.

4.3.1.3. Commission Determination of Decommissioning Costs

No Party will be bound by the Decommissioning Cost estimates in the Decommissioning Studies undertaken pursuant to Paragraphs 4.3.1.1 and 4.3.1.2, and final determination of each State's just and reasonable Decommissioning Cost allocation for each coal-fueled Interim Period Resource will remain exclusively with each Commission and will be determined in the depreciation dockets in which the Decommissioning Costs are included.¹²

4.3.1.4. Decommissioning Costs Allocation

For coal-fueled Interim Period Resources having a common operating life across all States, each State shall be allocated its share of actual Decommissioning Costs based on either an SG Factor (if closed during the Interim Period) or an Assigned Production ("AP") Factor, adjusted for any Reassignment or Limited Realignment effects (if closed after the Interim Period). For coal-fueled Interim Period Resources that do not have a common operating life across all States, each Exiting State shall be allocated, using either an SG Factor (if closed during the Interim Period) or an AP Factor, adjusted for any Reassignment or Limited Realignment effects (if closed after the Interim Period), that State's share of estimated Decommissioning Costs based on the Decommissioning Studies described in Sections 4.3.1.1 and 4.3.1.2. If the Decommissioning Costs ordered to be included in the reserve balance established for an Exiting State are less than the estimated Decommissioning Costs allocated to that Exiting State as specified above, such

¹² For California, Decommissioning Costs will be addressed in PacifiCorp's next general rate case.

difference shall not be allocated to any other State under any circumstance. If PacifiCorp effectuates Closure of a coal-fueled Interim Period Resource after one or more States have exited from the Resource, the Company may, with the burden of proof and subject to PacifiCorp supporting its proposal in testimony, ¹³ propose to allocate to and collect from each State that is participating in that Resource at the time of Closure that State's share, based on either an SG Factor (if closed during the Interim Period) or an AP Factor, adjusted for any Reassignment or Limited Realignment effects (if closed after the Interim Period), of actual Decommissioning Costs less the regulatory liabilities for Exiting States including interest as described in Section 4.3.2 and less any difference between the reserve balance established for each Exiting State and the estimated costs allocated to each Exiting State as described above. Parties in such State(s) may take any position regarding a Company request to recover Decommissioning Costs.

4.3.2. Accounting for Decommissioning Costs Reserve Balances when All States Do Not Exit a Unit

After an Exit Date by some but not all States, the estimated Decommissioning Costs reserves allocated to the Exiting State(s) associated with a coal-fueled Interim Period Resource unit, from which that State is exiting, will be accounted for as a regulatory liability that is excluded from rate base. Interest will be accrued on that regulatory liability at the Company's then-authorized weighted average cost of capital ¹⁴ for each State that continues to participate in that coal-fueled Interim Period Resource after an Exit Date until the decommissioning work on that unit is completed.

¹³ PacifiCorp's testimony will identify and explain the variances between estimated and actual Decommissioning Costs.

¹⁴ Not to exceed the maximum carrying charge allowed by applicable law or Commission Order.

4.3.3. Accounting for Interim and Final Retirements

Before any State exits a coal-fueled Interim Period Resource, but no later than December 31, 2021, the Company shall propose to the Parties a process for separately accounting for removal costs associated with interim retirements and final Decommissioning Costs in its accounting system. Each State may determine the regulatory treatment for such removal costs in appropriate proceedings.

4.3.4. Individual State Review Process

Any Party, at its discretion and cost, may pursue actions it deems necessary or appropriate to review and evaluate the Decommissioning Studies or Decommissioning Costs and may take any positions based on its review and findings. If a Commission issues an order identifying an independent evaluator for the Decommission Studies, and the Commission Order provides for the deferral and later recovery in rates of the cost of the independent evaluator, the Company agrees to initially pay for this independent evaluation.

4.4. Qualifying Facilities

The allocation of QF PPAs shall be treated in accordance with Sections 4.4.1 and 4.4.2 of this 2020 Protocol, superseding Section (IV)(A)(3) of the 2017 Protocol. For Washington, QF PPAs will be assigned and allocated consistent with the terms of Appendix F during the Interim Period. Other than addressing the allocation of the costs and assignment of benefits of QF PPAs among the States, this 2020 Protocol does not restrict or affect any Commission's jurisdiction over any agreement or interaction between QFs and the Company. QF PPAs shall be treated in the following manner for allocation and assignment purposes.

4.4.1. Existing QF PPAs

QF PPAs fully executed¹⁵ or as to which a legally enforceable obligation exists¹⁶ on or before December 31, 2019 ("Existing QF PPAs") will remain system assigned and allocated, subject to any Limited Realignment in Section 6.4, until the end of 2029, after which time they will be situs assigned and allocated to the State having jurisdiction over the QF PPA for avoided cost pricing ("State of Origin").

4.4.1.1. Wyoming QF Adjustment

The Company agrees to include: (1) a \$5 million adjustment, annually, to reduce Net Power Costs in Wyoming customer rates ¹⁷ beginning January 1, 2021, until December 31, 2022; and (2) a \$7.175 million adjustment, annually, to reduce Net Power Costs in Wyoming customer rates from January 1, 2023, until December 31, 2029. This adjustment will terminate on or before December 31, 2029, or upon issuance of any order by the Wyoming Commission that changes Wyoming's treatment of the Implemented Issues or the Resolved Issues from the terms of the 2020 Protocol. The adjustment shall be made solely at the Company's expense and not allocated to any other States.

4.4.2. New QF PPAs

QF PPAs fully executed or as to which a legally enforceable obligation exists after December 31, 2019, ("New QF PPAs") will be situs assigned and allocated for ratemaking proceedings pertaining to periods beginning on or after January 1, 2020, to the State of Origin.

¹⁵ Fully executed means executed and delivered by each party to the other party.

¹⁶ Any such legally enforceable obligation date must be confirmed by an order from the applicable Commission issued prior to the end of the Interim Period.

¹⁷ The Wyoming QF adjustment will be included in the base ECAM costs forecasted in a general rate case with rates effective on or after January 1, 2021. The Wyoming QF adjustment will be trued up in the ECAM at 100% (sharing-bands do not apply).

¹⁸ The Wyoming QF adjustment shall be removed from base ECAM costs on December 31, 2029, or as otherwise specified in Section 4.4.1.1, so that no adjustment flows through to customers in rates after that date unless it was deferred in the ECAM prior to December 31, 2029.

4.4.2.1. Interim Period Treatment – Pre-Nodal Pricing Model

For the Interim Period, the energy output of New QF PPAs will be dynamically allocated per this agreement using the SG Factor, priced at a forecasted reasonable energy price defined below, and any cost of a New QF PPA above the forecasted reasonable energy price will be situs assigned and allocated to the State of Origin. The forecasted reasonable energy price is a single blended market price derived from the Company's Official Forward Price Curve ("OFPC"), scaled for hourly prices, that was used for setting QF pricing for the New QF PPA. The single blended market price is calculated by applying the appropriate weighting to the hourly scaled prices from the OFPC for each market hub. The weightings per market hub are identified in the table below. The weighting will be applied by month and by heavy load hours ("HLH") and light load hours ("LLH"). The forecasted reasonable energy price, used for allocation purposes, shall be established at the time a QF PPA is fully executed.

Market Hub Weighting by Month - HLH												
Market	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
СОВ	0.00%	0.55%	1.34%	0.82%	3.45%	4.01%	8.41%	3.69%	8.58%	0.97%	1.79%	1.20%
Mid Columbia	24.42%	30.21%	55.74%	63.22%	70.84%	87.39%	81.05%	83.85%	75.88%	42.27%	34.30%	40.74%
Palo Verde	1.52%	2.53%	1.07%	0.66%	0.54%	0.03%	0.76%	1.89%	1.85%	2.55%	3.45%	0.30%
Four Corners	64.72%	58.68%	35.94%	27.40%	16.15%	5.75%	4.12%	2.17%	3.82%	45.79%	52.88%	44.47%
Mead	0.18%	0.13%	1.23%	1.46%	1.52%	1.74%	1.95%	3.30%	6.64%	0.33%	0.12%	0.57%
Mona	9.16%	7.90%	2.94%	2.03%	1.79%	0.74%	0.01%	0.18%	1.82%	7.82%	7.46%	2.18%
NOB	0.00%	0.00%	1.75%	4.40%	5.72%	0.33%	3.70%	4.92%	1.41%	0.27%	0.00%	10.54%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

	Market Hub Weighting by Month - LLH											
Market	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
СОВ	0.00%	0.99%	5.17%	3.53%	15.50%	15.16%	5.97%	1.21%	0.31%	2.43%	3.44%	1.16%
Mid Columbia	58.74%	60.10%	76.58%	66.36%	71.82%	80.41%	85.52%	92.26%	83.27%	62.78%	66.30%	59.09%
Palo Verde	0.00%	1.12%	0.42%	0.04%	0.39%	0.40%	2.71%	3.04%	0.00%	0.92%	1.91%	2.30%
Four Corners	33.45%	34.66%	13.63%	26.49%	10.44%	3.30%	5.35%	2.39%	11.60%	27.69%	26.36%	29.65%
Mead	0.00%	0.06%	0.94%	0.44%	0.93%	0.47%	0.25%	0.00%	0.00%	0.57%	0.00%	0.00%
Mona	7.81%	3.07%	1.54%	2.41%	0.92%	0.27%	0.00%	1.11%	4.82%	5.61%	1.99%	7.80%
NOB	0.00%	0.00%	1.71%	0.73%	0.00%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

4.4.2.2. Post-Interim Period Treatment

After the conclusion of the Interim Period, assuming resolution and Commission approval of all Framework Issues, the Parties agree that New QF PPAs will be situs assigned and the costs

and benefits will be allocated and assigned per the methodology developed through the Framework process in Section 6.2.

5. Resolved Issues - Post-Interim Period Implementation

The Parties agree, conditioned upon reaching agreement on a Post-Interim Period Method on the future allocation treatment described in this Section 5 for certain benefits, revenues, costs, and investments. As stated in Section 2, these Resolved Issues of the 2020 Protocol are intended to take effect with the implementation of the Post-Interim Period Method. Parties acknowledge that conditions may change materially in unforeseen ways during the Interim Period and that it may be necessary to re-evaluate Resolved Issues as part of the Post-Interim Period Method. The Resolved Issues are identified below.

5.1. Generation Costs

Following the Interim Period, a fixed share of the Interim Period Resources will be assigned to serve load in each State. The costs and benefits, including environmental attributes, associated with each Interim Period Resource will be allocated and assigned in accordance with the Interim Period Resources fixed allocation provisions (Section 5.1.1), Reassignment of coalfueled Interim Period Resources (Section 4.2), and Limited Realignment (Section 6.4).

5.1.1. Interim Period Resources Fixed Allocation

Interim Period Resources will be assigned and allocated to States based on the SGF Factor for each State as defined in Appendix C. The load information used to determine the SGF Factor is subject to modification for the inclusion or exclusion of Special Contract loads as determined through the Framework process for resolution of issues addressed in Section 6.3. The SGF Factor is used to develop the AP Factor for each unit. Additionally, Interim Period Resources will be subject to the Limited Realignment as outlined in Section 6.4 and the Reassignment of Interim

Period Resources as outlined in Section 4.2. Any such Assignment of Interim Period Resources, along with the Limited Realignment and the Reassignment of Interim Period Resources, will be subject to the following:

- Accumulated depreciation for Interim Period Resources will be allocated per the AP Factor. State-specific accumulated depreciation that has been tracked by the Company due to increased depreciation expenses will be treated as situs to the State and offset its Resource costs until that State exits from an Interim Period Resource.
- Accumulated deferred income taxes and excess deferred income taxes will be allocated per the Company's tax software system, using the AP Factor. State-specific accumulated deferred income taxes and excess deferred income taxes that have been tracked by the Company due to increased depreciation expense will be treated as situs to the State and offset that State's Resource costs until that State exits from an Interim Period Resource.
- All O&M expenses that are associated with a specific Interim Period Resource will be allocated per the AP Factor.
- All generation-related O&M expenses that cannot be allocated to a specific Interim Period Resource through an AP Factor, such as general office generation management expenses, will be allocated to States based on an Assigned Production Operations and Maintenance ("APOM") Factor, calculated as each States' relative share of direct-allocated generation O&M expenses. There will be three separate APOM factors based on FERC classifications, with the APOMS used for steam generation (FERC accounts 500 514), APOMH used for hydro generation (FERC accounts 546 accounts 535-545) and APOMO used for other generation (FERC accounts 546 -

- 554). The APOM factor calculations are shown in Appendix C and also included in Appendix B, Column 5.
- Property tax will continue to be allocated based on gross plant using the GPS Factor as calculated in Appendix C and included in Appendix B, Column 5.
- All other rate-base items associated with Interim Period Resources will be allocated consistent with the Interim Period Resource allocations using the AP Factor.

5.1.2. New Resources Fixed Assignment

New Resources include any Resources that are not in commercial operation before the end of the Interim Period. All costs and benefits associated with new Resources, subject to the qualification below, will be allocated and assigned to States based on a fixed assignment under the process to be determined in Section 6.1 – Resource Planning and New Resource Assignment. The Parties agree that a transitional period is necessary to change the cost allocation for future new Resources that are planned for by the Company, and that any new Resource reaching commercial operation before the end of the Interim Period will be treated the same as Interim Period Resources for allocation purposes under the terms of this Agreement.

5.2. Transmission Costs

The costs associated with transmission assets, except as addressed in Section 6.1, will be dynamically allocated among States on the System Transmission ("ST") Factor, generally calculated based on a classification of costs as 75 percent Demand-Related and 25 percent Energy-Related, and based on twelve monthly Coincident Peaks, using weather-normalized retail peak and energy data, as more thoroughly defined in Appendix C.

All revenues recovered through PacifiCorp's Open Access Transmission Tariff or other transmission rate schedules approved by the FERC will be allocated based on the ST Factor.

The 2020 Protocol does not preclude PacifiCorp from participating in any independent transmission organization, regional transmission organization, or other similar wholesale transmission market subject to the jurisdiction and oversight of the FERC.

5.3. Distribution Costs

All distribution-related expenses and capital costs that can be directly allocated will be directly allocated to the States where the related distribution facilities are located. Those distribution expenses that cannot be directly allocated will be allocated among States on a System Net Plant Distribution ("SNPD") factor, as shown in Appendix B.

5.4. System Overhead Costs

Costs that support more than one function, such as generation, transmission, or distribution plant, will continue to be allocated on the System Overhead ("SO") Factor after the Interim Period but will be calculated based on an equal one-third weighting of the System Capacity ("SC") Factor, System Energy Factor, and System Gross Plant Distribution ("SGPD") Factor, as shown in Appendix B.

5.5. Administrative and General Costs

Administrative and General Costs, General Plant costs, and Intangible Plant costs, both expenses and investments, which can be directly allocated will be directly allocated to the appropriate State(s). Those costs that cannot be directly allocated will be allocated among States consistent with the factors set forth in Appendix B.

5.6. Other Allocation Issues

Items included in the Company's results of operations, other than those that are specifically called out herein, will continue to be allocated on the same factors used in the 2017 Protocol. The

FERC account and allocation factor combinations are included in Appendix B. The algebraic 747 derivation and factor definitions are included in Appendix C. 748 The following miscellaneous changes will be made to be consistent with the other 749 allocation changes: 750 Communication equipment allocated on the System Generation Factor during the 751 Interim Period will change to either the SE Factor (generation-related) or ST Factor 752 (transmission-related) depending on the nature of the equipment for which the 753 communication equipment is utilized. 754 Contributions In Aid of Construction ("CIAC") currently allocated on the SG 755 Factor will change to either the AP factor for generation-related CIAC or the ST 756 Factor for transmission related CIAC. 757 Generation-related dispatch costs and associated plant will be allocated on the SE 758

- Factor.
- Miscellaneous regulatory assets and liabilities, and miscellaneous deferred debits will be allocated with the appropriate allocation factor depending on the related assets or underlying costs. Miscellaneous regulatory assets and liabilities, and miscellaneous deferred debits currently allocated on the SG Factor, will change to the AP Factor for generation-related and ST Factor for transmission-related items.

Taxes and fees will be allocated as follows:

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Income taxes will be calculated using the federal tax rate and PacifiCorp's combined State effective tax rate. State specific Schedule M and deferred income tax amounts will be allocated using the Company's tax software system. Consistent with prior system allocation methods, the Washington Public Utility Tax is allocated using the SO Factor in lieu of a Washington income tax.

- Franchise taxes, revenue related taxes, Commission assessments and fees, and usage related taxes are situs or a pass through.
- Property taxes are system allocated based on gross plant and allocated on the GPS
 Factor.
- Generation and fuel related taxes will follow the assignment of the Resource.
- Other taxes such as payroll taxes are embedded in the cost of expense or capital.

Balances associated with the Trojan Decommissioning will be allocated using the Trojan Decommissioning Fixed ("TROJDF") Factor. This will not affect State-specific treatment of this item.

5.7. Demand-Side Management Programs

Costs associated with DSM Programs, including Class 1 DSM Programs, will continue to be allocated on a situs basis to the State in which the investment is made. The benefits from these programs will flow back to the State through Net Power Costs or through reduced or delayed future capacity needs that will be addressed in the development and implementation of the process identified in Section 6.1.

5.8. State-Specific Initiatives

Costs and benefits resulting from a State-specific initiative will continue to be allocated and assigned on a situs basis to the State adopting the initiative. Historically, these have included, but are not limited to, programs such as incentive programs and customer and community energy generation programs, but have not included local fees or taxes related to the ongoing operation of existing transmission and generation facilities within a State. As new issues arise, PacifiCorp will

bring each issue to the MSP Workgroup to discuss whether each issue is a State-specific initiative, and, if not, whether a different allocation method is appropriate.

6. Framework Issues

The Parties acknowledge that certain components of the Post-Interim Period Method are not resolved by this Agreement, including Resource Planning and new Resource Assignment, Net Power Costs / Nodal Pricing Model, the treatment of Special Contracts, post-Interim Period capital additions, and other issues related to the transition from a dynamically-allocated system generation portfolio to fixed generation portfolios. As part of the 2020 Protocol, the Parties agree to the following processes and timeframes to address remaining, unresolved Framework Issues and to request approval of a new Post-Interim Period Method agreement by the Commissions. The Company will file for Commission consideration and approval of a new Post-Interim Period Method in accordance with Section 2. The general understanding reached by the Parties as to process and timelines for Framework Issues is as follows.

6.1. Resource Planning and New Resource Assignment

Continued operation, planning, and dispatch of the Company's system as an integrated six-State system, to the greatest extent practicable, will likely be beneficial to PacifiCorp's customers. However, because of differing State policies requiring or excluding certain generation resources, it appears infeasible to continue serving customers with a common generation portfolio and dynamically allocating system costs. Continued dynamic allocation of all system costs in this environment could result in increased costs for some States, if not all. Accordingly, allocating costs and assigning benefits associated with generation capacity will require assignment of specific Resources, and potentially certain transmission assets, to a specific State or States. The goal is to

allow PacifiCorp to meet its legal requirements as a public utility in each State in a risk-adjusted, least-cost manner, while striving to mitigate cost impacts to other States.

PacifiCorp will continue to plan for capacity and operating needs, both for the entire interstate system and for each State. PacifiCorp will work with Parties to develop:

- A planning process that optimizes risk-adjusted, least-cost resource portfolios on a system basis to the extent practicable, while meeting individual State requirements and maintaining system reliability; and
- A process that assigns benefits and allocates costs of specific new Resources added in order to meet an individual State's needs.

Parties will evaluate these processes in light of existing or new Commission regulatory processes governing Resource planning, procurement, and investment approval.

6.2. Net Power Costs / Nodal Pricing Model ("NPM")

A method to track the costs and benefits of Resource portfolios which may differ for each State will be necessary in the future to maintain the benefits of system dispatch as much as practicable. Specifically, after the Interim Period when States may no longer participate in a common Resource portfolio, a NPM may be used to track cost causation and receipt of benefits by each State for rate-making purposes.

Consistent with and in consideration of the Nodal Pricing Model Memorandum of Understanding in Appendix D, the Company agreed to begin the development of an NPM with a third-party vendor and will use best efforts to implement the NPM by the end of January 2021, for purposes of total-Company day-ahead scheduling. Parties intend for this to provide some time and

experience with the NPM before it may be used for rate making as part of the Post-Interim Period Method.¹⁹

The Company will also use best efforts to implement a model that can forecast NPC based on the NPM concept. During the Interim Period, this model may be used by the Company for forecast analysis of NPC. After the Interim Period, the Company intends to propose the use of this model for NPC forecasts in applicable rate-making proceedings.

6.3. Special Contracts

The Company will continue to work in good faith with the Special Contract customers to develop one or more proposals for consideration by the Parties on the treatment of Special Contracts' loads, costs, and benefits as part of the Framework Issues and will make best efforts to present a proposal to Parties by September 1, 2021, with the intention of incorporating such proposal into the Post-Interim Period Method.

6.4. Limited Realignment

The Parties agree to investigate during the Interim Period the potential Limited Realignment of Interim Period Resources among the States. Limited Realignment is intended to address, among other potential issues, the transition of Washington retail customers away from coal-fueled Interim Period Resource in compliance with the Washington CETA by realigning Interim Period Resources, including natural gas-fueled Interim Period Resources.

6.5. Post-Interim Period Capital Additions – Coal-Fueled Interim Period Resources

For a coal-fueled Interim Period Resource for which one or more States have an Exit Date that differs from the depreciable life or Exit Date ordered in any other State, a process is needed

¹⁹ NPM is intended to be used for total Company system dispatch when it is fully functional and operational and will impact system Net Power Costs that flow through State NPC balancing accounts.

for determining the cost allocation for capital investments made in the Resources subsequent to the Interim Period and prior to the Exit Date for each State. The Parties have agreed to evaluate, but have not accepted, the following Company straw proposal for post-Interim Period capital investments, information about which is provided here not for Commission approval but to inform future discussions.

6.5.1. PacifiCorp Straw Proposal - Post-Interim Period Capital Investment Allocation Exceptions

For post-Interim Period incremental capital investments that are made primarily for the purpose of extending the life of a coal-fueled Interim Period Resource beyond a State's Exit Date for that Resource, including but not limited to those associated with achieving compliance with environmental requirements or those necessitated by catastrophic failure, such investments would not be allocated to States that have issued such Exit Orders and would be allocated based on the percentage shares of the coal unit Reassignment process addressed in Section 4.2 or as otherwise determined for States that continue to participate in the coal-fueled Interim Period Resource.

For these incremental capital investments made primarily for the purpose of repairing a coal-fueled Interim Period Resource following a catastrophic failure of the Interim Period Resource, such investments would not be allocated to and no generation or benefits will be assigned to States that have issued Exit Orders for that Resource. Parties in States not allocated costs for such investments would support recovery of any remaining net book value and Decommissioning Costs.

6.5.2. PacifiCorp Straw Proposal - Incremental Capital Investments Made Between 2024 and the Exit Date Where Exit Date is On or Before December 31, 2027

For States with Exit Orders for a coal-fueled Interim Period Resource specifying an Exit Date on or before December 31, 2027, capital investments made in such Interim Period Resource

after the Interim Period and prior to the Exit Date, would be allocated to an Exiting State based on the AP Factor, adjusted for any Limited Realignment impacts agreed to, and pro-rated for the number of years remaining based on the longest life ordered in any State's depreciation docket or rate case by December 31, 2020, for such Interim Period Resource. States without Exit Orders in such Interim Period Resource would be allocated the remaining amount of capital investment based on proportional shares of the AP factor for the States that will be participating in the coal-fueled Interim Period Resource after an Exit Date. For example, if a State's Exit Order establishes an Exit Date four years from the date the capital investment is in-service, and the Interim Period Resource has the longest remaining life in another State of ten years, the State with the Exit Order would be allocated four-tenths of that State's share of the cost of the qualifying capital investment. Each State's allocation of such capital investments would be subject to a prudence review based on the cost to be allocated to each State consistent with this Section.

6.5.3. PacifiCorp Straw Proposal - Incremental Capital Investments Made in 2024 and 2025 Where Exit Date is After 2027

For States with Exit Orders for a coal-fueled Interim Period Resource specifying an Exit Date after 2027, capital investments made in such Interim Period Resource after the Interim Period and through December 31, 2025, would be allocated to all States based on the AP Factor, adjusted for any Limited Realignment impacts agreed to, and prudence of such capital investments for States with Exit Orders would be determined based on the life established for such Interim Period Resource in the Exit Order. This would allow for the reasonable allocation of capital and operating costs for the Interim Period Resource during a period of time while PacifiCorp pursues the process established in Section 4.2.

6.5.4. PacifiCorp Straw Proposal - Incremental Capital Investments Made Between 2026 and the Exit Date Where the Exit Date is After 2027

For States with Exit Orders for a coal-fueled Interim Period Resource specifying an Exit Date after 2027, capital investments made in such Interim Period Resource after December 31, 2025, and until the Exit Date, would be allocated to an Exiting State based on the AP Factor, adjusted for any Limited Realignment impacts agreed to, and pro-rated for the number of years remaining based on the longest life ordered in any State's depreciation docket, Reassignment proceeding, or rate case as of December 31, 2025. States that will be participating in the coal-fueled Interim Period Resource after an Exit Date would be allocated the remaining amount of any capital investment based on the AP Factor calculated for that coal-fueled Interim Period Resource.

7. Allocation of Gain or Loss from Sale of Assets

Any gain or loss from the sale of Company-owned assets will be allocated among or to States based upon the proportional allocation or assignment of the asset at the time of the execution date of the sale agreement. Each Commission will determine the appropriate allocation of the gain or loss allocated to that State as between PacifiCorp's customers and shareholders. For assets that have been Reassigned for less than one calendar year as of the execution date of the sale agreement, States will be allocated the gain or loss as if the asset had remained a System Resource.

8. Interpretation and Governance

8.1. Issues of Interpretation

Parties will attempt, consistent with their legal obligations, to resolve questions of interpretation of the 2020 Protocol, in good faith in light of the language of the 2020 Protocol and the intent of the Parties.

8.2. Workgroups

8.2.1. Framework Issues Workgroup

PacifiCorp will schedule and convene meetings with Parties to continue negotiations of the Framework Issues, which may occur in person or remotely.

8.2.2. Multi-State Process Workgroup

Consistent with Sections 8.4 or 8.5 of this Agreement, the Company will notify Parties and other MSP participants if it determines a need exists to convene the MSP Workgroup to address general allocation issues or complaints related to the 2020 Protocol. Any Party to this Agreement, State utility regulatory agency, or other stakeholder can participate in the MSP Workgroup. The MSP Workgroup may create sub-committees to investigate or evaluate or make recommendations as to specified issues. MSP Workgroup meetings may be held in person or remotely.

8.3. Commissioner Forum

The 2017 Protocol included a mandatory requirement to hold an annual Commissioner Forum each January during the pendency of that agreement. Under this 2020 Protocol, Commission Forums are not required. A Commission or the MSP Workgroup may request such a meeting of Commissioners. If a Commissioner Forum is requested, all seated commissioners from each State will be invited to participate. Commissioner Forums will be public meetings, and all interested parties will be allowed to attend. Before attending a Commissioner Forum, each Commission can take such steps and provide such process for public input as the Commission determines is necessary or appropriate under applicable State laws.

8.4. Proposals to Change the 2020 Protocol during the Interim Period

The Parties agree not to propose or support changes to the 2020 Protocol applicable to the Interim Period based on a Party's dissatisfaction with a reasonably foreseeable outcome from implementation of the 2020 Protocol. Before proposing an alternative or modification to the 2020

Protocol based primarily on changed or unforeseen circumstances, each Party agrees to first make the proposal to the Parties and attempt in good faith to resolve the concern before asking a Commission to change the 2020 Protocol. The provisions of this Section 8.4 will apply to any State agency only to the extent consistent with the State agency's statutory obligations.

Proposals for modifications to the 2020 Protocol may be submitted to the Company by any Party. Proposals received by the Company shall be circulated in a timely manner to the other Parties and the Company shall initiate discussions to attempt to address and resolve specific concerns.

8.5. Replacement of the 2020 Protocol

If any stakeholder that is not a Party to this Agreement objects to the use of the 2020 Protocol after approval by the Commissions or proposes a new inter-jurisdictional allocation procedure, PacifiCorp may convene the MSP Workgroup and hold discussions to attempt to address and resolve the concerns at an MSP Workgroup meeting(s).

8.6. Interdependency Among Commission Approvals

The 2020 Protocol has been developed and negotiated by the Parties as an integrated, interdependent whole. Support by any Party of the 2020 Protocol is expressly conditioned upon approval without material alteration of the 2020 Protocol by all Commissions in the States that PacifiCorp has sought approval. If any Commission disapproves, alters, or conditions approval of the 2020 Protocol, Parties shall promptly meet and discuss the implications of that Commission's action. PacifiCorp shall report to the Parties any Commission Order of another State concerning the 2020 Protocol. Parties agree to recommend to each Commission that approval of the 2020 Protocol be conditioned on other Commissions approving the 2020 Protocol without change.

²⁰ California has historically reviewed allocation methodologies in conjunction with a general rate case. PacifiCorp's next regulatory-mandated general rate case will not be filed until 2021 at the earliest.

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PacifiCorp asserts that the 2020 Protocol complies with the requirements of current resource laws of all of the States and will not shift risk of compliance among PacifiCorp's States. If a future change in law, court decision, or Commission decision results in the Company's reasonable belief that compliance with all applicable laws cannot be achieved, the Company will raise its concerns with the Parties and/or convene an MSP Workgroup meeting to address the issue.

10. Signatures of Parties to the 2020 Protocol

PACIFICORP Harry	ALLIANCE OF WESTERN ENERGY CONSUMERS
By: Senjor Vice President,	Ву:
Title: Strategic Business Planning	Title:
Date: November 22, 2019	Date:
IDAHO CONSERVATION LEAGUE	IDAHO PUBLIC UTILITIES COMMISSION STAFF
Ву:	By:
Title:	Title:
Date:	Date:

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PACIFICORP // //	ALLIANCE OF WESTERN ENERGY CONSUMERS
By: Senjor Vice President, Title: Strategic Business Planning	By: Mh J Title: Attorney
Date: November 22, 2019	Date: 11/25/19
IDAHO CONSERVATION LEAGUE	IDAHO PUBLIC UTILITIES COMMISSION STAFF
Ву:	By:
Title:	Title:
Date:	Date:

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By: Senjor Vice President,	Ву:
Title: Strategic Business Planning	Title:
Date: November 22, 2019	Date:
IDAHO CONSERVATION LEAGUE	IDAHO PUBLIC UTILITIES COMMISSION
By: Br Cto	By:
Title: Energy Associate	Title:
Date: November 27 2019	Date:
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Ву:	By: Jerri Carlock
Title:	Title: Administrator Utilities Division
Date:	Date: 11/26/2019

IDAHO IRRIGATION PUMPERS ASSOCIATION	INTERWEST ENERGY ALLIANCE
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MONSANTO COMPANY	NORTHWEST & INTERMOUNTAIN POWER PRODUCERS
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NORTHWEST ENERGY COALITION	
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OREGON CITIZENS' UTILITY BOARD	OREGON PUBLIC UTILITY COMMISSION STAFF
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MONSANTO COMPANY	NORTHWEST & INTERMOUNTAIN POWER PRODUCERS
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Title: Attorney for Monsanto	Title:
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COUNCIL	
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SIERRA CLUB	UTAH ASSOCIATION OF ENERGY USERS
Ву:	By:
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UTAH CLEAN ENERGY	UTAH DIVISION OF PUBLIC UTILITIES
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Title: Staff Attorney	Title:
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SIERRA CLUB	UTAH ASSOCIATION OF ENERGY USERS
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POWDER RIVER BASIN RESOURCE COUNCIL	RENEWABLE NORTHWEST
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UTAH CLEAN ENERGY	UTAH DIVISION OF PUBLIC UTILITIES
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Title:	Title: DIRECTOR
Date:	Title: DIRECTOR Date: 11/25/19

UTAH INDUSTRIAL ENERGY	UTAH OFFICE OF CONSUMER SERVICES
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WASHINGTON UTILITIES & TRANSPORTATION COMMISSION STAFF	WESTERN RESOURCE ADVOCATES
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WOLVERINE FUELS	WYOMING INDUSTRIAL ENERGY CONSUMERS
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WOLVERINE FUELS	WYOMING INDUSTRIAL ENERGY CONSUMERS
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UTAH INDUSTRIAL ENERGY CONSUMERS	UTAH OFFICE OF CONSUMER SERVICES
CONSUMERS	
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Title:	Title:
Date:	Date:

APPENDIX A

Definitions

- 1 For purposes of this Agreement, the following terms will have the following meanings:
- "2017 Protocol" refers to the 2017 PacifiCorp Inter-Jurisdictional Allocation Protocol.
- "2020 Protocol" refers to the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol.
- "Administrative and General Costs" means costs included in FERC accounts 920 through 935.
- "Assigned Production Factor" or "AP" means States' assigned share of a Resource (see Appendix
 C for more details).
 - "Assigned Production Operations and Maintenance Factor" or "APOM Factor" means the State allocated share of all generation related operating and maintenance expenses that cannot be associated with a specific Resource, such as general office generation management expenses, that will be allocated to States calculated as each State's relative share of directly allocated generation operating and maintenance expenses for steam, hydro, and other generation functions (see Section 5.1.1 and Appendix C for more details).
 - "Class 1 Demand-Side Management" or "Class 1 DSM" means dispatchable or scheduled firm DSM resources, sometimes referred to as direct load control programs.
 - "Closure" means either PacifiCorp's termination of ownership interest in a Resource, permanent cessation of operations of a Resource, permanent cessation of receipt of energy from a Resource, or otherwise retirement of a Resource.
 - "Coincident Peak" means the hour each month that the combined demand of all PacifiCorp retail customers is greatest, adjusted for normal weather conditions. The hour of coincident peak is calculated assuming weather normalized retail load, and as it relates to generation allocation factors, it includes adjustments for Class 1 DSM and Special Contract curtailments. In calculating the

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- coincident peak for the System Transmission Factor, the only adjustment will be for weather normalization.
- "Commission" means a utility regulatory commission in a State.
- "Commissioner Forum" means the meeting of Commissioners from all States, the goal of which is to provide an update from the MSP Workgroup. Such a forum is not required by the 2020 Protocol.
 - "Commission Order" means a formal determination issued by a State Commission consistent with its authority as provided by a State's statutes or administrative rules.
- "Company" means PacifiCorp.

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- "Contributions in Aid of Construction" or "CIAC" means contributions from customers to pay
 their share of a capital construction project above the amount their retail rates justify. CIAC is a
 reduction to rate base, (see Appendix C for more detail).
 - "Customer Ancillary Services" means products or services that may be provided by a customer to the Company, such as in which the Company has the right to curtail electric service to the customer so as to lower the costs of operating the Company's system.
 - "Customer Ancillary Service Contracts" means contracts between the Company and a retail customer pursuant to which the Company pays the customer for Customer Ancillary Services
 - "Decommissioning Costs" means the costs of removal and environmental remediation or reclamation net of any salvage value realized required at the time a generation resource is physically retired.
 - "Decommissioning Studies" means the engineering studies carried out in advance of planned coal-fueled Interim Period Resource Reassignment filings in February of 2021 and June of 2024, in order to identify the final Decommissioning Cost liabilities of Exiting States, as specifically identified in Section 4.3.1.
- "Demand-Related" describes capital and other fixed costs incurred by the Company in order to be prepared to meet the maximum demand imposed upon its system.

- "Demand-Side Management Programs" or "DSM Programs" means programs intended to reduce electricity use through activities or programs that promote electric energy efficiency or conservation, more efficient management of electric energy loads, or reductions in peak demand.
 - "Embedded Cost Differential" or "ECD" means the sum of PacifiCorp's production costs of pre2005 resources as defined in the 2010 Protocol, excluding west side hydro, Mid-Columbia Contracts,
 and Qualified Facility contracts, referred to as "all other generation resources" expressed in dollars
 per megawatt-hour compared to west hydro-electric resources production costs expressed in dollars
 per megawatt-hour with the difference multiplied by the hydro-electric resources megawatt-hours
 of production, and the differential between the all other generation resources dollars per megawatthour compared to Mid-Columbia Contracts costs dollars per megawatt-hour multiplied by the MidColumbia Contracts megawatt-hours.
 - "Dynamic Embedded Cost Differential" or "Dynamic ECD" means the ECD components are updated to the test period utilized in the filing.
 - "Fixed Embedded Cost Differential" or "Fixed ECD" means the ECD amount for a State is set at a point of time and not updated.
- "Energy Imbalance Market" or "EIM" means the multi-Balancing Authority Area (BAA) real-time market operated by the California Independent System Operator (CAISO) that balances electricity supply and demand every five minutes by choosing the least-cost resource to serve system load.
- "Energy-Related" means variable costs incurred by the Company in order to deliver the energy required to serve customers.
- "Existing QF PPAs" is defined in Section 4.4.1 of the agreement.

- "Exit Date" means the date, established in an Exit Order entered by a Commission, on which
 PacifiCorp intends to discontinue the allocation of costs and assignment of benefits of a coal-fueled
 Interim Period Resource to the State issuing the Exit Order.
- "Exiting State" means a State with a final order from a State Commission approving the exit from a coal-fueled Interim Period Resource on a date certain.
- "Exit Order" means an order entered by a Commission establishing an Exit Date consistent with the 2020 Protocol.
- "Extended Day-Ahead Market" or "EDAM" means a market currently still in development that
 will address ramping needs between intervals and uncertainty that can occur between the day-ahead
 and real-time markets.
- **"FERC"** means the Federal Energy Regulatory Commission.
- "Five States" means the States of California, Idaho, Oregon, Utah, and Wyoming.
- "Fixed Costs" means costs incurred by the Company that do not vary with the amount of energy delivered by the Company to its customers during any hour.
- **"Framework"** is defined in Section 1 of the Agreement.
- **"Framework Issue"** is defined in Section 1 of the Agreement.
- "General Plant" means capital investment included in FERC accounts 389 through 399.
- "Implemented Issues" is defined in Section 1 of the Agreement.
- "Intangible Plant" means capital investment included in FERC accounts 301 through 303.
- "Interim Period" is defined in Section 2 of the Agreement.
- "Interim Period Resource" means Resource in commercial operation, or with a contract delivery date, as applicable, during the Interim Period.
- "Limited Realignment" means the assignment of Interim Period Resources among PacifiCorp

 States that differ from assignment using the SGF Factor.

- "Load-Based Dynamic Allocation Factor" means an allocation factor that is calculated using States' monthly energy usage and/or States' contribution to monthly system Coincident Peak.
- "Mid-Columbia Contracts" means the various power sales agreements between PacifiCorp and Public Utility District No. 2 of Grant County, PacifiCorp and Douglas County Public Utility District, and PacifiCorp and Chelan County Public Utility District, specifically: the Power Sales Contract with Public Utility District No. 2 of Grant County dated May 22, 1956; the Power Sales Contract with Public Utility District No. 2 of Grant County dated June 22, 1959; the Priest Rapids Project Product Sales Contract with Public Utility District No. 2 of Grant County dated December 31, 2001; the Additional Products Sales Agreement with Public Utility District No. 2 of Grant County dated December 31, 2001; the Priest Rapids Project Reasonable Portion Power Sales Contract with Public Utility District No. 2 of Grant County dated December 31, 2001; the Power Sales Contract with Douglas County Public Utility District dated September 18, 1963; the Power Sales Contract with Chelan County Public Utility District dated November 14, 1957, and all successor contracts thereto.
 - "MSP Workgroup" means a group of regulators, the Company, and other interested stakeholders
 that convenes to discuss the assignment or allocation of PacifiCorp revenues, costs, and investments
 among the States.
 - "Multi-State Process" or "MSP" means the ongoing Company-led convening of Parties from all six States in which it operates to consider issues related to fair cost allocations among the States.
 - "Net Power Costs" or "NPC" means PacifiCorp's fuel and wheeling expenses and costs and revenues associated with long-term Wholesale Contracts, Short-Term Purchases and Sales and Non-Firm Purchases and Sales.
 - "New QF PPA" is defined in Section 4.4.2 of the Agreement.
- "Nodal Pricing Model" or "NPM" means a method for pricing electricity proposed by the

 Company that is based on the marginal cost (\$/MWh) of serving the next increment of demand at a

given pricing node consistent with existing transmission constraints and the performance characteristics of resources.

- "Nodal Pricing Model Memorandum of Understanding" or "NPM MOU" means the agreement
 among the Parties on the prudence of the Company's proceeding to implement the Nodal Pricing
 Model that may be adopted for the calculation of net power costs (NPC) through a new interjurisdictional cost-allocation methodology.
- "Non-Firm Purchases and Sales" means transactions at wholesale that are not Wholesale Contracts or Short-Term Purchases and Sales.
- "Open Access Transmission Tariff" means PacifiCorp's Open Access Transmission Tariff on file with FERC.
- "Operations and Maintenance" or "O&M" means costs incurred by the Company to maintain its assets that are expensed as defined by FERC.
- "Oregon Direct Access Consumer" means Oregon retail electricity consumers that procure electricity from a supplier other than PacifiCorp under an Oregon Direct Access Program.
- "Oregon Direct Access Program" means Oregon laws, regulations, and orders that permit
 PacifiCorp's Oregon retail consumers to purchase electricity directly from a supplier other than
 PacifiCorp.
- "Party" or "Parties" means certain State Commission staff members, regulatory agencies, customers, consumer advocates, conservation organizations, and other interested parties from California, Idaho, Oregon, Utah, Washington, and Wyoming who have executed this Agreement.
- "Portfolio Standard" means a law or regulation that requires PacifiCorp to acquire: (a) a particular type of Resource, (b) a particular quantity of Resources, (c) Resources in a prescribed manner or (d)

 Resources located in a particular geographic area.

- "Post-Interim Period Method" means the resolution of the Framework Issues combined with the
 Implemented Issues and the Resolved Issues are all intended to result in the new allocation
 methodology for PacifiCorp's six States.
 - "Post-Interim Period Resources" means Resources that begin commercial operation, or with a contract or delivery date, as applicable, after the end of the Interim Period.
 - "Qualifying Facility" or "QF" means small power production or cogeneration facilities developed
 under the Public Utility Regulatory Policies Act of 1978 (PURPA) and related State laws and
 regulations.
- "Qualifying Facility Power Purchase Agreement" or "QF PPA" means contracts to purchase the output of a Qualifying Facility by the Company.
 - "Reassignment", "Reassign", or "Reassigned" means assigning benefits from an Exiting State's share of a coal-fueled Interim Period Resource to those States with Commission orders to accept the cost responsibility allocation for the Exiting State's portion of the coal-fueled Resource.
 - "Resolved Issues" is defined in Section 1 of the Agreement.
 - "Resource" means a Company-owned generating unit, plant, mine, long-term Wholesale Contract, Short-Term Purchase and Sale, Non-firm Purchase and Sale, or QF contract.
 - "Short-Term Firm Purchases and Firm Sales" means physical or financial contracts pursuant to which PacifiCorp purchases, sells, or exchanges firm power at wholesale and Customer Ancillary Service Contracts that are less than one year in duration.
 - "Short-Term Purchases and Sales" means physical or financial contracts pursuant to which PacifiCorp purchases, sells, or exchanges firm power at wholesale and Customer Ancillary Service Contracts that are less than one year in duration.
- "Special Contract" means a contract entered into between PacifiCorp and one of its retail customers
 with prices, terms, and conditions different from otherwise-applicable tariff rates. Special Contracts

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- may provide for a value consideration to the customer to reflect attributes of Customer Ancillary

 Service Contracts.
- "State" means California, Oregon, Idaho, Utah, Washington, or Wyoming.
- "State Resources" means Interim Period Resources whose costs are assigned to a single jurisdiction to accommodate jurisdiction-specific policy preferences.
 - "System Energy Factor" or "SE Factor" is defined in Appendix C.
- "System Generation-Fixed Factor" or "SGF Factor" is defined in Appendix C.
- "System Gross Plant Distribution Factor" or "SGPD Factor" is defined in Appendix C.
 - "System Net Plant-Distribution Factor" or "SNPD Factor" is defined in Appendix C.
- "System Overhead Factor" or "SO Factor" is defined in Appendix C.
- "System Resources" means Interim Period Resources that are not State Resources and whose associated costs and revenues are allocated among all States on a dynamic basis.
 - "System Transmission Factor" or "ST Factor" is defined in Appendix C.
- "Trojan Decommissioning" means costs associated with decommissioning the Trojan Plant.
- "Trojan Decommissioning Fixed Factor" or ("TROJDF") is defined in Appendix C.
- "Trojan Plant" means the now-decommissioned nuclear plant for which the Company is still recovering costs.
- "Variable Costs" means costs incurred by the Company that vary with the amount of energy delivered by the Company to its customers during any hour.
- "Washington Public Utility Tax" means a Washington tax on public service businesses, including businesses that engage in transportation, communications, and the supply of energy, natural gas, and water. The tax is in lieu of the business and occupation (B&O) tax.
- "West Control Area Inter-jurisdictional Allocation Methodology" or "WCA" means the allocation protocol methodology used by Washington to allocate costs consistent with its Balancing Area Authority-based principles governing the assets deemed to serve Washington.

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• "Wholesale Contracts" means physical or financial contracts pursuant to which PacifiCorp purchases, sells, or exchanges firm power at wholesale and Customer Ancillary Service Contracts.

APPENDIX B

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2020 Protocol - Appendix B **Allocation Factors by Account by Revenue Requirement Components**

2 1 INTERIM PERIOD POST INTERIM PERIOD FERC ACCT **ACCT NAME** REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR **FACTOR FACTOR** Sales to Ultimate Customers Residential Sales Retail Revenues Direct assigned - Jurisdiction s S Commercial & Industrial Sales

Retail Revenues Direct assigned - Jurisdiction

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		actors by Account by Nevertae Requirement	-	
1	2	3	4	5
			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	<u>FACTOR</u>	<u>FACTOR</u>
Miscellaneous Revenue	es			
41160	Gain on Sale of Utili	ty Plant - CR		
		Distribution	S	S
		Production	SG	AP
		Transmission	SG	ST
		General Office	SO	SO
41170	Loss on Sale of Utili	ty Plant		
		Distribution	S	S
		Production	SG	AP
		Transmission	SG	ST
		General Office	SO	SO
4118	Gain from Emission	Allowances		
		SO2 Emission Allowance sales	SE	AP
41181	Gain from Dispositio	n of NOX Credits		
		NOX Emission Allowance sales	SE	AP
		TOX Emission / movance sales	02	7.11
404	(0 :) (1	Charles Division		
421	(Gain) / Loss on Sale	•		
		Distribution	S	S
		Production	SG	AP
		Transmission	SG	ST
		General Office	SO	SO
		Customer Related	CN	CN
		Customer Netated	CIN	CIN
Miscellaneous Expense				
4311	Interest on Custome	r Deposits		
		Customer Service Deposits	CN	CN
		Direct assigned - Jurisdiction	S	S
		-		
Steam Power Generation	nn .			
		an O Fanisansian		
500, 502, 504-514	Operation Supervision			
		Steam Plants O&M	SG	AP, APOMS
501	Fuel Related			
		Steam plants Fuel	SE	AP, APOMS
503	Steam From Other S	Sources		
000	Otodin i rom Othor C		SE	AD ADOMS
		Steam Royalties	3E	AP, APOMS
Nuclear Power Generat	ion			
517 - 532	Nuclear Power O&M			
		Nuclear Plants O&M	SG	AP
Hydraulic Power Gener	ation			
535 - 545	Hydro O&M			
555 - 545	riyalo Oalvi	D 10 11 1 2011	20	45 4504
		Pacific Hydro O&M	SG	AP, APOMH
		East Hydro O&M	SG	AP, APOMH
Other Power Generatio	n			
546, 548-554	Operation Super & E	Engineering		
	•	Other Production Plant	SG	AP, APOMO
			30	,
5.47	Euol			
547	Fuel	04 5 15	c-	4B 45000
		Other Fuel Expense	SE	AP, APOMO

1	2	3	4	5
			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT Other Power Supply	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	<u>FACTOR</u>
555	Purchased Power			
353	Fulcilased Fower	Tracking Mechanisms	S	S
		Firm	SG	AP, NP
		Non-firm	SE	AP, NP
			01	7,
556	System Control & Lo	oad Dispatch		
	·	Other Expenses	SG	SE
557	Other Expenses			
		Direct assigned - Jurisdiction	S	S
		Other Expenses	SE	SE
		Other Expenses	SG	APOMS, APOMH, APOMO
		Cholla Transaction	SGCT	AP
TO ANOMICOION EVOE				
TRANSMISSION EXPEN	Transmission O&M			
560-564, 566-573	Transmission Oaw	Transmission Plant O&M	SG	ST
		Transmission Frank Odivi	30	31
565	Transmission of Ele	ectricity by Others		
		Firm Wheeling	SG	ST
		Non-Firm Wheeling	SE	ST
		GRID Management Charge	SG	SE
DISTRIBUTION EXPENS	SE			
580 - 598	Distribution O&M			
		Direct assigned - Jurisdiction	S	S
		Other Distribution	SNPD	SNPD
CUSTOMER ACCOUNT		001		
901 - 905	Customer Accounts		6	0
		Direct assigned - Jurisdiction Total System Customer Related	S CN	S CN
		Total System Customer Related	CN	CIN
CUSTOMER SERVICE I	EXPENSE			
907 - 910	Customer Service C	D&M		
		Direct assigned - Jurisdiction	S	S
		Total System Customer Related	CN	CN
SALES EXPENSE				
911 - 916	Sales Expense O&N	М		
		Direct assigned - Jurisdiction	S	S
		Total System Customer Related	CN	CN
	=\\>=\\=			
ADMINISTRATIVE & GE		wastel Fire and		
920-935	Administrative & Ge	·	0	c
		Direct assigned - Jurisdiction	S	S
		Customer Related Mine	CN SE	CN AP
		FERC Regulatory Expense	SG	ST
		General General	so	SO
			00	

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FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	INTERIM PERIOD <u>FACTOR</u>	POST INTERIM PERIOD FACTOR
DEPRECIATION EX	KPENSE			
403SP	Steam Depreciation			
		Steam Plants	SG	AP
403NP	Nuclear Depreciatio	n		
		Nuclear Plant	SG	AP
403HP	Hydro Depreciation			
		Pacific Hydro	SG	AP
		East Hydro	SG	AP
403OP	Other Production De		20	45
		Other Production Plant	SG	AP
402TD	Transmission Depre	gistion		
403TP	Transmission Depre	Transmission Plant	SG	ST
		Hansinission Flant	30	31
403	Distribution Depreci	ation Direct assigned - Jurisdiction		
100	Diotribution Doproof	Land & Land Rights	S	S
		Structures	S	S
		Station Equipment	S	S
		Storage Battery Equipment	S	S
		Poles & Towers	S	S
		OH Conductors	S	S
		UG Conduit	S	S
		UG Conductor	S	S
		Line Trans	S	S
		Services	S	S
		Meters	S	S
		Inst Cust Prem	S	S
		Leased Property	S	S
		Street Lighting	S	S
403GP	General Depreciation			
		Distribution	S	S
		Steam Plants	SG	AP
		Mining	SE	AP
		Pacific Hydro	SG	AP
		East Hydro	SG	AP
		Transmission	SG	ST
		Customer Related	CN	CN
		General	SO	SO
403MP	Mining Depresiation			
403IVIF	Mining Depreciation	Mining Plant	SE	AP
		g	OL	7.11

·	_	•	INTERIM PERIOD	
FERC ACCT AMORTIZATION EXE	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	<u>FACTOR</u>
404GP		- Capital Lease Gen		
10101	7 more of ETT faire	Direct assigned - Jurisdiction	S	S
		General	so	SO
		Customer Related	CN	CN
		Sustainer Polated	011	O.V
404SP	Amort of LT Plant	- Cap Lease Steam		
		Steam Production Plant	SG	AP
404IP	Amort of LT Plant	- Intangible Plant		
		Distribution	S	S
		Production	SG	AP
		Transmission	SG	ST
		General	SO	SO
		Mining Plant	SE	AP
		Customer Related	CN	CN
		Sustained Related	OIV	ON
404MP	Amort of LT Plant	- Mining Plant		
		Mining Plant	SE	AP
404HP	Amortization of Ot			
		Pacific Hydro	SG	AP
		East Hydro	SG	AP
405	Amortization of Ot	her Electric Plant		
		Direct assigned - Jurisdiction	S	S
406	Amortization of Pla		_	
		Direct assigned - Jurisdiction	S	\$
		Production Plant	SG	AP
407	Amort of Prop Los	ses, Unrec Plant, etc.		
		Direct assigned - Jurisdiction	S	S
		Production,	SG	AP
		Transmission	SG	ST
Taxes Other Than In 408	come Taxes Other Than	Income		
.00	. a.co othor man	Direct assigned - Jurisdiction	S	S
		Property	GPS	GPS
		System Taxes	so	so
		Misc Energy	SE	AP
		Misc Production	SG	AP
				·
DEFERRED ITC				
41140	Deferred Investme	ent Tax Credit - Fed		
		ITC	DGU	DGUF
41141	Deferred Investme	ent Tax Credit - Idaho		
71171	Doloned IIIveStille	ITC	DGU	DGUF
			200	DGUI

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			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT Interest Expense	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	<u>FACTOR</u>
427	Interest on Long-Te	erm Debt		
		Direct assigned - Jurisdiction	S	S
		Interest Expense	SNP	SNP
428	Amortization of Deb	ot Disc & Exp		
		Interest Expense	SNP	SNP
429	Amortization of Pre	mium on Debt		
		Interest Expense	SNP	SNP
431	Other Interest Expe	nse		
		Interest Expense	SNP	SNP
432	AFUDC - Borrowed			
		AFUDC	SNP	SNP
Interest & Dividends				
419	Interest & Dividend	S		
		Interest & Dividends	SNP	SNP
DEFERRED INCOME T	TAXES			
41010	Deferred Income Ta	ax - DR		
		Direct assigned - Jurisdiction	S	S
		Non-Coal and Gas Production	SG	AP
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Customer Related	CN	CN
		General	SO	SO
		Property Tax related	GPS	GPS
		Miscellaneous	SNP	SNP
		Trojan	TROJD	TROJDF
		Distribution	SNPD	SNPD
		Mining Plant	SE	AP
		Bad Debt	BADDEBT	BADDEBT
		Tax Depreciation	TAXDEPR	TAXDEPR

1	2	3	4	5
			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	<u>FACTOR</u>
41110	Deferred Income	Tax -CR		
		Direct assigned - Jurisdiction	S	S
		Non-Coal and Gas Production	SG	AP
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Customer Related	CN	CN
		General	so	SO
		Property Tax related	GPS	GPS
		Miscellaneous	SNP	SNP
		Trojan	TROJD	TROJDF
		Distribution	SNPD	SNPD
		Mining Plant	SE	AP
		Contributions in Aid of Construction	CIAC	CIAC
		Production, Other	SGCT	AP
		Book Depreciation	SCHMDEXP	SCHMDEXP
SCHEDULE - M ADDI	TIONS			
SCHMAF	Additions - Flow	Through		
		Direct assigned - Jurisdiction	S	S
SCHMAP	Additions - Perm	anent		
		Direct assigned - Jurisdiction	S	S
		Mining related	SE	AP
		General	SO	SO
		Non-Coal and Gas Production	SG	AP
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Depreciation	SCHMDEXP	SCHMDEXP
SCHMAT	Additions - Temp	porary		
		Direct assigned - Jurisdiction	S	S
		Bad Debt	BADDEBT	BADDEBT
		Contributions in Aid of Construction	CIAC	CIAC
		Miscellaneous	SNP	SNP
		Trojan	TROJD	TROJDF
		Non-Coal and Gas Production	SG	AP
		Mining Plant	SE	AP
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Property Tax	GPS	GPS
		General	SO	SO
		Depreciation	SCHMDEXP	SCHMDEXP
		Distribution	SNPD	SNPD
		Production, Other	SGCT	AP

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			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	FACTOR
SCHEDULE - M DEDUC	CTIONS			
SCHMDF	Deductions - Flow	Through		
		Direct Assigned - Jurisdiction	S	S
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Non-Coal and Gas Production	SG	AP
SCHMDP	Deductions - Perm	anent		
		Direct Assigned - Jurisdiction	S	S
		Mining Related	SE	AP
		Depreciation	SCHMDEXP	SCHMDEXP
		Miscellaneous	SNP	SNP
		General	SO	SO
SCHMDT	Deductions - Temp	porary		
		Direct Assigned - Jurisdiction	S	S
		Bad Debt	BADDEBT	BADDEBT
		Miscellaneous	SNP	SNP
		Non-Coal and Gas Production	SG	AP
		Mining related	SE	AP
		Coal and Gas Production	SG	AP
		Transmission	SG	ST
		Property Tax	GPS	GPS
		General	so	SO
		Depreciation	TAXDEPR	TAXDEPR
		Distribution	SNPD	SNPD
		Customer Related	CN	CN
State Income Taxes				
40911	State Income Taxes			
40911		Income Before Taxes	CALCULATED	CALCULATED
40911		Renewable Energy Tax Credit	SG	AP
40910		FIT True-up	S	S
40910		Renewable Energy / Production Tax Credit	SG	AP
40911		PacifiCorp Minerals Inc.	SE	AP
40911		Foreign Tax Credit	so	SO
Steam Production Plan	nt			
310 - 316	Steam Plants			
		Steam Plants	SG	AP
Nuclear Production Pla	ant			
320-325	Nuclear Plant			
		Nuclear Plant	SG	AP
Hydraulic Plant				
330-336	Hydro Plant			
		Pacific Hydro	SG	AP
		East Hydro	SG	AP

1 5 INTERIM PERIOD POST INTERIM PERIOD FERC ACCT **ACCT NAME** REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR **FACTOR FACTOR** Other Production Plant 340-346 Other Production Plant Other Production Plant - Situs S S Other Production Plant ΑP SG TRANSMISSION PLANT 350-359 Transmission Plant Transmission Plant SG ST DISTRIBUTION PLANT 360-373 Distribution Plant Direct assigned - Jurisdiction S S **GENERAL PLANT** 389 - 398 General Plant Distribution S s Pacific Hydro SG ΑP East Hydro SG ΑP Production SG AP, SE Transmission SG ST **Customer Related** CN CN General SO SO Mining SE ΑP 399 Coal Mine SE ΑP Mining Plant General Gas Line Capital Leases 1011346 Capital Lease ΑP SG 1011390 General Capital Leases Direct assigned - Jurisdiction s s so so General Generation SG ΑP Transmission SG ST INTANGIBLE PLANT 301 Organization Direct assigned - Jurisdiction S S 302 Franchise & Consent Direct assigned - Jurisdiction s s Production SG AP Transmission SG ST 303 Miscellaneous Intangible Plant Distribution S S Pacific Hydro SG ΑP East Hydro SG AP Production SG ΑP Transmission ST SG Customer Related CN CN General SO SO ΑP Mining SE Other SG SGF

FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	INTERIM PERIOD <u>FACTOR</u>	POST INTERIM PERIOD FACTOR
303	Less Non-Utility Pla	ant Direct assigned - Jurisdiction	S	S
Rate Base Additions		Direct assigned - Junisticulon	3	3
105	Plant Held For Futu	rre Use		
		Direct assigned - Jurisdiction	S	S
		Production	SG	AP
		Transmission	SG	ST
		Mining Plant	SE	AP
114	Electric Plant Acqui	isition Adjustments		
		Direct assigned - Jurisdiction	S	S
		Production Plant	SG	AP
		Transmission	SG	ST
115	Accum Provision fo	or Asset Acquisition Adjustments		
		Direct assigned - Jurisdiction	S	S
		Production Plant	SG	AP
		Transmission	SG	ST
124	Weatherization			
		Direct assigned - Jurisdiction	S	S
		General	SO	SO
128	Pensions			
		General	SO	SO
182W	Weatherization			
		Direct assigned - Jurisdiction	S	S
186W	Weatherization			
		Direct assigned - Jurisdiction	S	S
151	Fuel Stock			
131	Fuel Slock	Steam Production Plant	SE	AP
450	5 10: 1 II II I			
152	Fuel Stock - Undistr	Steam Production Plant	SE	AP
25316	UAMPS Working C			
		Mining Plant	SE	AP
25317	DG&T Working Cap	pital Deposit		
		Mining Plant	SE	AP
25319	Provo Working Cap	oital Deposit		
		Mining Plant	SE	AP

1	2	3	4	5
			INTERIM PERIOD	POST INTERIM PERIOD
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	FACTOR
154	Materials and Sup	plies		
		Direct assigned - Jurisdiction	S	S
		Production,	SG	AP
		Transmission	SG	ST
		Mining	SE	AP
		Production - Common	SG	AP
		General	so	SO
		Distribution	SNPD	SNPD
		Production, Other	SG	AP
		r roadstan, outo		<i>,</i>
163	Stores Expense U	Indistributed		
	0.0.00 <u>Expo</u> 00 0	General	SO	SO
		Contral	00	00
25318	Provo Working Ca	onital Denosit		
20010	1 1000 Working Ca	Provo Working Capital Deposit	SG	AP
		1 10v0 vvolking Capital Deposit	30	Δi
165	Propaymente			
100	Prepayments	Direct agains of Inviediation	c	S
		Direct assigned - Jurisdiction	S	
		Property Tax	GPS	GPS
		Production	SG	AP
		Transmission	SG	ST
		Mining	SE	AP
		General	SO	SO
182M	Misc Regulatory A			
		Direct assigned - Jurisdiction	S	S
		Production	SG	AP
		Transmission	SG	ST
		Mining	SE	AP
		General	SO	SO
		Production, Other	SGCT	AP
		Other	SG	SGF
186M	Misc Deferred Del	bits		
		Direct assigned - Jurisdiction	S	S
		Production	SG	AP
		Transmission	SG	ST
		General	SO	SO
		Mining	SE	AP
		Production - Common	SG	AP
		Other	SG	SGF
Working Capital				
CWC	Cash Working Cap	pital		
		Direct assigned - Jurisdiction	S	S
OWC	Other Working Ca	pital		
131		Cash	SNP	SNP
135		Working Funds	SG	AP
141		Notes Receivable	SO	SO
143		Other Accounts Receivable	so	SO

1	2	3	4	5	
			INTERIM PERIOD	POST INTERIM PERIOD	
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	FACTOR	
232	· <u> </u>	Accounts Payable	SO	SO	
232		Accounts Payable	SE	AP	
232		Accounts Payable	SG	ST, AP, SGF	
25330		Other Deferred Credits - Misc	SE	AP	
230		Other Deferred Credits - Misc	SE	AP	
254105		ARO Reg Liability	SE	AP	
		•			
Rate Base Deductions					
235	Customer Service D	Deposits			
		Direct assigned - Jurisdiction	S	S	
		• • • • • • • • • • • • • • • • • • • •			
2281	Prov for Property Insurance				
	, ,	Prov for Property Insurance	SO	SO	
		, ,			
2282	Prov for Injuries & D	Damages			
	,	Prov for Injuries & Damages	so	SO	
		, ,			
2283	Prov for Pensions a	and Benefits			
		Prov for Pensions and Benefits	so	SO	
22841	Accum Misc Oper F	Prov-Black Lung			
		Other Production	SG	AP	
254105	FAS 143 ARO Regi	ulatory Liability			
		ARO	S	S	
		Trojan Plant	TROJD	TROJDF	
		•			
230	Asset Retirement C	bligation			
		Trojan Plant	TROJD	TROJDF	
252	Customer Advances	s for Construction			
		Direct assigned - Jurisdiction	S	S	
		Production	SG	AP	
		Transmission	SG	ST	
		Customer Related	CN	CN	
25398	S02 Emissions				
		S02 Emissions	SE	AP	
25399	Other Deferred Credits				
		Direct assigned - Jurisdiction	S	S	
		Production	SG	AP	
		Transmission	SG	ST	
		General	so	SO	
		Mining	SE	AP	
254	Regulatory Liabilities				
		Insurance Provision	SO	SO	

1 INTERIM PERIOD POST INTERIM PERIOD FERC ACCT **ACCT NAME** REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR **FACTOR FACTOR** 190 Accumulated Deferred Income Taxes s Direct assigned - Jurisdiction S Bad Debt **BADDEBT** BADDEBT Non-Coal and Gas Production SG ΑP Coal and Gas Production SG ΑP Transmission SG ST Customer Related CN CN General SO SO Miscellaneous SNP SNP TROJD TROJDF Trojan Distribution SNPD SNPD Mining Plant SE AP 281 Accumulated Deferred Income Taxes Non-Coal and Gas Production SG ΑP Coal and Gas Production SG ΑP Transmission SG ST 282 Accumulated Deferred Income Taxes Direct assigned - Jurisdiction S S Depreciation DITBAL DITBAL Non-Coal and Gas Production SG Coal and Gas Production SG ΑP Transmission SG ST Customer Related CN CN General SO SO Miscellaneous SNP SNP Depreciation **TAXDEPR** TAXDEPR SCHMDEXP SCHMDEXP Depreciation GPS GPS System Gross Plant Contribution in Aid of Construction CIAC CIAC SE ΑP Mining 283 Accumulated Deferred Income Taxes S s Direct assigned - Jurisdiction DITBAL DITBAL Depreciation Non-Coal and Gas Production SG AP Coal and Gas Production SG ΑP Transmission ST SG Customer Related CN CN General SO SO Miscellaneous SNP SNP TROJDF Trojan TROJD Production, Other SGCT ΑP Property Tax GPS GPS Mining Plant SE ΑP 255 Accumulated Investment Tax Credit Direct assigned - Jurisdiction S S Investment Tax Credits ITC84 ITC84 Investment Tax Credits ITC85 ITC85 Investment Tax Credits ITC86 ITC86 **Investment Tax Credits** ITC88 ITC88 ITC89 Investment Tax Credits ITC89

Investment Tax Credits
Investment Tax Credits

ITC90

SG

ITC90

SGF

1	2	3	4	5		
			INTERIM PERIOD	POST INTERIM PERIOD		
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	<u>FACTOR</u>		
PRODUCTION PLANT	ACCUM DEPRECIATION	ON				
108SP	Steam Prod Plant Accumulated Depr					
		Steam Plants	SG	AP		
108NP	Nuclear Prod Plant Accumulated Depr					
		Nuclear Plant	SG	AP		
108HP	Hydraulic Prod Plar	nt Accum Depr				
		Pacific Hydro	SG	AP		
		East Hydro	SG	AP		
108OP	Other Production P	lant - Accum Depr				
		Other Production Plant	SG	AP		
TRANS PLANT ACCUM	DEPR					
108TP	Transmission Plant	Accumulated Depr				
		Transmission Plant	SG	ST		
DISTRIBUTION PLANT	ACCUM DEPR					
108360 - 108373	Distribution Plant A	ccumulated Depr				
		Direct assigned - Jurisdiction	S	S		
108D00	Unclassified Dist Pl	ant - Acct 300				
		Direct assigned - Jurisdiction	S	S		
		2. Color designed Canadianon	· ·	· ·		
108DS	Unclassified Dist S	ub Plant - Acct 300				
.0020	5.101d001110d 210t 0	Direct assigned - Jurisdiction	S	S		
		2. Cost acongress Canadatori	· ·	· ·		
108DP	Unclassified Dist S	ub Plant - Acct 300				
10051	Choladolilloa Blot O	Direct assigned - Jurisdiction	S	S		
		2. Cost acongress Canadatori	· ·	· ·		
GENERAL PLANT ACC	UM DEPR					
108GP	General Plant Accu	mulated Depr				
10001	Ocheral Flank Accu	Distribution	S	S		
		Pacific Hydro	SG	AP		
		East Hydro	SG	AP		
		Production	SG	AP AP		
		Transmission	SG	ST		
		Customer Related	CN	CN		
		General SO	SO			
				SO		
		Mining Plant	SE	AP		
400MD	Mining Diest As	oulated Door				
108MP	Mining Plant Accum	Mining Plant	SE	AP		
		wining Fidit	SE	Ar		
1001200	Acoum Dear Cont	tol Lease				
1081390	Accum Depr - Capi		80	80		
		General	SO	SO		
4004200	A D C	tel I acco				
1081399	Accum Depr - Capi		0	6		
		Direct assigned - Jurisdiction	S	S		

		3	7	J			
			INTERIM PERIOD	POST INTERIM PERIOD			
FERC ACCT	ACCT NAME	REVENUE REQUIREMENT COMPONENTS ASSIGNED TO FACTOR	FACTOR	FACTOR			
ACCUM PROVISION FOR AMORTIZATION							
111SP	Accum Prov for Am	ort-Steam					
		Steam Plants	SG	AP			
111GP	Accum Prov for Am	ort-General					
	71000	Distribution	S	S			
		Pacific Hydro	SG	AP			
		East Hydro	SG	AP			
		Production	SG	AP			
		Transmission	SG	ST			
		Customer Related	CN	CN			
		General SO	so	SO			
111HP	Accum Prov for Am	ort-Hydro					
		Pacific Hydro	SG	AP			
		East Hydro	SG	AP			
111IP	Accum Prov for Am	ort-Intangible Plant					
	71000	Distribution	S	S			
		Pacific Hydro	SG	AP			
		Production	SG	AP			
		Transmission	SG	ST			
		General	SO	SO			
		Mining	SE	AP			
		Customer Related	CN	CN			
111IP	Less Non-Utility Plant						
		Direct assigned - Jurisdiction	S	S			
111390	Accum Prov Amort - Capital Leases						
		Distribution	S	S			
		Production	SG	AP			
		General	SO	SO			

APPENDIX C

Definitions of Allocation Factors

Factors without an effective period will be used during and after the Interim Period.

i denotes count of jurisdictions. j denotes count of month in a year. N is the number of regulatory jurisdictions that the Company operates in and allocates costs to.

Assigned Production Factor ("AP") - Effective after Interim Period

$$AP_i = \frac{SGF_i}{\sum_{i=1}^{x} SGF_i}$$

where:

AP_i = **Assigned Production Factor** for jurisdiction i.

SGF_i = System Generation – Fixed Factor for jurisdiction i.

x = Number of jurisdictions that are assigned the unit.

The AP factor may be calculated by unit of Resources, group of Resources, or for specific periods of capital investments. The AP factor may change over time as allocations change due to jurisdictions accepting a larger or smaller assignment in units that lead to the change in the value of x.

For example,

1. Assuming a unit is assigned to States A, B and C out of six jurisdictions in year 1, and their SGF factors are

SGF_A = 25%, SGF_B = 45%, and SGF_C = 15%, respectively, then
$$AP_A = \frac{25\%}{25\% + 45\% + 15\%} = 29.4\%$$

$$AP_B = \frac{45\%}{25\% + 45\% + 15\%} = 52.9\%$$

$$AP_C = \frac{15\%}{25\% + 45\% + 15\%} = 17.6\%$$

2. Assuming the unit is later assigned to States B and C only, then the AP factors will change to

$$AP_A = 0\%$$

$$AP_B = \frac{45\%}{45\% + 15\%} = 75\%$$

$$AP_C = \frac{15\%}{45\% + 15\%} = 25\%$$

3. Assuming the unit is later assigned to C only, then the AP factors will change to

$$AP_A = 0\%$$
 $AP_B = 0\%$
 $AP_C = \frac{15\%}{15\%} = 100\%$

Accounts using AP factor: Sales for Resale (447), Water Sales (453), Miscellaneous Revenue (41160, 41170, 4118, 41181, 421), Generation (500-555, 557), Administrative and General Expense (920-935), Depreciation Expense (403SP, 403NP, 403HP, 403OP, 403GP, 403MP) Amortization Expense (404SP, 404IP, 404MP, 404MP, 406-407), Taxes Other Than Income (408), Deferred Income Tax Expense (41010, 41110), Schedule M, Income Taxes (40910, 40911), Generation Plant (310-346), General Plant (389-399), Intangible Plant (302-303), Plant Held for Future Use (105), Electric Plant Acquisition Adjustments (114-115), Fuel Stock (151-152), Materials and Supplies (154), Mining Working Capital Deposits (25316-25319), Prepayments (165), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (135, 232, 25330, 230, 245105), Accum Misc Oper Prov-Black Lung (22841), Customer Advances for Construction (252), SO2 Emissions (25398), Other Deferred Credits (25399), Regulatory Liabilities ARO Regulatory Liability (254105), Accumulated Deferred Income Taxes (190, 281-283), Accumulated Depreciation (108SP, 108NP, 108NP, 108OP, 108GP, 108MP), Accumulated Provision for Amortization (111SP, 111GP, 111HP, 111IP, 111390)

Assigned Production Factor of New Resources - Effective after Interim Period

Initial values of AP factors for all new resources will be addressed as part of the Framework discussions on Resource Planning.

Assigned Production Hydro - O&M Factor ("APOMH") - Effective after Interim Period

$$APOMH_i = \frac{PPOMH_i}{\sum_{i=1}^{N} PPOMH_i}$$

where:

APOMH_i = **Assigned Production Hydro O&M Factor** for jurisdiction i. PPOMH_i = Sum of all hydro production plant O&M costs allocated to jurisdiction i using the AP factors.

N = Number of jurisdictions.

The APOMH factor is used to allocate hydro generation related O&M costs that cannot be allocated to a specific hydro resource through an AP factor, calculated as each States' relative share of direct-allocated hydro generation and maintenance expenses.

Accounts using APOMH factor: Hydro (535-545, 557)

Assigned Production Other – O&M Factor ("APOMO") – Effective after Interim Period

$$APOMO_i = \frac{PPOMO_i}{\sum_{i=1}^{N} PPOMO_i}$$

where:

 $APOMO_i$ = **Assigned Production Other O&M Factor** for jurisdiction i.

 $PPOMO_i$ = Sum of all other production plant O&M costs allocated to

jurisdiction i using the AP factors.

N = Number of jurisdictions.

The APOMO factor is used to allocate other generation related O&M costs that cannot be allocated to specific other production Resource through an AP factor, calculated as each States' relative share of directly-allocated other production generation and maintenance expenses.

Accounts using APOMO factor: Other Generation (546-554, 557)

Assigned Production Steam - O&M Factor ("APOMS") - Effective after Interim Period

$$APOMS_i = \frac{PPOMS_i}{\sum_{i=1}^{N} PPOMS_i}$$

where:

 $APOMS_i$ = **Assigned Production Steam O&M Factor** for jurisdiction i.

 $PPOMS_i$ = Sum of all steam production plant O&M costs allocated to

jurisdiction i using the AP factors.

N = Number of jurisdictions.

The APOMS factor is used to allocate steam generation related O&M costs that cannot be allocated to specific steam resource through an AP factor, calculated as each States' relative share of direct-allocated steam generation and maintenance expenses.

Accounts using APOMS factor: Generation (500-514, 557)

Bad Debt Expense Factor ("BADDEBT")

$$BADDEBT_i = \frac{ACCT904_i}{\sum_{i=1}^{N} ACCT904_i}$$

where:

BADDEBT_i = **Bad Debt Expense Factor** for jurisdiction i.

ACCT904i = Balance in FERC Account 904 for jurisdiction i.

N = Number of jurisdictions.

The BADDEBT Factor is calculated by dividing the FERC account 904 Uncollectible Accounts amount for a jurisdiction by the total 904 amount for all jurisdictions. The factor allocates tax related costs for bad debt related expenses.

Accounts using BADDEBT factor: Deferred Income Tax Expense (41010), Schedule M, Accumulated Deferred Income Taxes (190)

Contributions in Aid of Construction Factor ("CIAC")

$$CIAC_i = \frac{CIACNA_i}{\sum_{i=1}^{N} CIACNA_i}$$

where:

 $CIAC_i$ = Contributions in Aid of Construction Factor for jurisdiction i.

 $CIACNA_i$ = Contributions in aid of construction – net additions for jurisdiction i.

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N = Number of jurisdictions.

The CIAC Factor is calculated by dividing the contribution in aid of construction net additions for a jurisdiction by the total contribution in aid of construction net additions for all jurisdictions. The factor allocates tax related costs for contributions in aid of construction.

Accounts using CIAC factor: Deferred Income Tax Expense (41110), Schedule M, Accumulated Deferred Income Taxes (282)

Customer Number Factor ("CN")

$$CN_i = \frac{CUST_i}{\sum_{i=1}^{N} CUST_i}$$

where:

 CN_i = **Customer Number Factor** for jurisdiction i. $CUST_i$ = Total electric customers for jurisdiction i.

N = Number of jurisdictions.

The Customer Number Factor is calculated using the ratio of number of customers for a jurisdiction to the total number of electric customers for all jurisdictions. The factor is used to allocate customer related costs.

Accounts using CN factor: Gain / Loss on Sale of Utility Plant (421), Customer Service Deposits (4311), Other Electric Revenue (456), Customer Account Expense (901-905), Customer Service Expense (907-910), Sales Expense (911-916), Administrative and General Expense (920-935), General Plant Depreciation (403GP), Amortization Intangible Plant (404IP), Deferred Income Tax Expense (41010, 41110), Schedule M, General Plant (389-398), Intangible Plant (303), Customer Advances for Construction (252), Accumulated Deferred Income Taxes (190, 282-283), General Plant Accumulated Depreciation (108GP), Accumulated Provision for Amortization (111IP)

Deferred Tax Balance Factor ("DITBAL")

$$DITBAL_{i} = \frac{DITBALA_{i}}{\sum_{i=1}^{N} DITBALA_{i}}$$

where:

 $DITBAL_i$ = **Deferred Tax Balance Factor** for jurisdiction i.

 $DITBALA_i$ = Deferred tax balance allocated to jurisdiction i.

(Deferred tax balance is allocated by a run of PowerTax based upon the above factors. PowerTax is a computer software package used to

track deferred tax expense & deferred tax balance.)

N = Number of jurisdictions.

The DITBAL Factor is used to allocate deferred tax balances to jurisdictions.

Accounts using DITBAL factor: Accumulated Deferred Income Taxes (282, 283)

Division Generation – Pacific Factor ("DGP")

$$DGP_i = \frac{SG^*_i}{\sum_{i=1}^{N} SG^*_i}$$

where:

 DGP_i = **Division Generation** - **Pacific Factor** for jurisdiction i.

 SG_i^* = SG_i if i is a pre-merger Pacific Power jurisdiction, otherwise 0.

 SG_i = System Generation Factor for jurisdiction i.

N = Number of jurisdictions.

The DGP Factor is calculated as the ratio of the pre-merger Pacific Division's SG factor for a jurisdiction divided by the sum of the pre-merger Pacific Division's SG factors.

The DGP factor is only used in calculating the dynamic ECD

Division Generation – Utah Factor ("DGU")

$$DGU_i = \frac{SG^*_i}{\sum_{i=1}^{N} SG^*_i}$$

where:

 DGU_i = **Division Generation** – **Utah Factor** for jurisdiction i.

 SG_i^* = SG_i if i is a pre-merger Utah Power jurisdiction, otherwise 0.

 SG_i = System Generation Factor for jurisdiction i.

N = Number of jurisdictions.

After the Interim Period, the factor is determined by the average of the four-year historical value from 2018 to 2021, or 2019 to 2022 if the Interim Period is extended.

The DGU Factor is calculated as the ratio of the pre-merger Utah Power jurisdiction's SG factor for a jurisdiction divided by the sum of the pre-merger Utah Power jurisdiction's SG factors.

The only accounts using DGU factor are Deferred Investment Tax Credits (41140, 41141)

Gross Plant System Factor ("GPS")

$$GPS_{i} = \frac{PP_{i} + PT_{i} + PD_{i} + PG_{i} + PI_{i}}{\sum_{i=1}^{N} (PP_{i} + PT_{i} + PD_{i} + PG_{i} + PI_{i})}$$

where:

 GPS_i = Gross Plant System Factor for jurisdiction i.

 PP_i = Production plant for jurisdiction i.

 PT_i = Transmission plant for jurisdiction i.

 PD_i = Distribution plant for jurisdiction i.

 PG_i = General plant for jurisdiction i.

 PI_i = Intangible plant for jurisdiction i.

N = Number of jurisdictions.

The GPS Factor is used to allocate property taxes. It is calculated using the ratio of gross plant for a jurisdiction divided by the total gross plant for all jurisdictions.

The accounts using GPS factor: Taxes Other Than Income Taxes (408), Deferred Income Tax Expense (41010, 41110), Schedule M, Prepayments (165), Accumulated Deferred Income Taxes (282, 283)

Nodal Pricing Assignment of Net Power Costs ("NP")

Costs listed as allocated by NP in Appendix B are costs that will be allocated through the Nodal Pricing Model.

Accounts using NP factor: Sales for Resale (447), Purchased Power (555)

<u>Schedule M – Depreciation Expense Factor ("SCHMDEXP")</u>

$$SCHMD_i = \frac{DEPRC_i}{\sum_{i=1}^{N} DEPRC_i}$$

where:

SCHMD_i = Schedule M – Depreciation Expense Factor for jurisdiction i.

DEPRC_i = Depreciation in FERC Accounts 403.1 - 403.9 for jurisdiction i.

Number of jurisdictions.

The SCHMDEXP factor is used to allocate Schedule M items related to depreciation expense. The accounts using SCHMDEXP factor: Deferred Income Tax Expense (41110), Schedule M, Accumulated Deferred Income Taxes (282)

System Capacity Factor ("SC")

$$SC_{i} = \frac{\sum_{j=1}^{12} TAP_{ij}}{\sum_{i=1}^{N} \sum_{j=1}^{12} TAP_{ij}}$$

where:

 SC_i = **System Capacity Factor** for jurisdiction i.

 TAP_{ij} = Weather-normalized peak load of jurisdiction i at the time of the

system peak in month j. During the Interim Period, the peak load is further adjusted to exclude the peak load of Class 1 Demand Side Management programs and interruptible peak load of the special

contracts as defined in the 2017 Protocol.

N = Number of jurisdictions.

The SC factor is calculated based on the relative capacity requirements of each State as determined based on 12 monthly Coincident Peaks that is used to calculate the System Generation and System Transmission factors

System Energy Factor ("SE")

$$SE_{i} = \frac{\sum_{j=1}^{12} TAE_{ij}}{\sum_{i=1}^{N} \sum_{j=1}^{12} TAE_{ij}}$$

where:

 SE_i = **System Energy Factor** for jurisdiction i.

 TAE_{ij} = Weather-normalized energy at input of jurisdiction i in month j.

N = Number of jurisdictions.

The SE factor is used to allocate energy-related costs and is calculated as the ratio of the weather-normalized energy at input for a jurisdiction divided by the total weather-normalized energy at input for all jurisdictions.

Accounts using SE factor for Interim period: Sales for Resale (447), Other Electric Revenue (456), Miscellaneous Revenue (4118, 41181), Steam Plants Fuel (501), Steam from Other Sources (503), Other Fuel Expense (547), Purchased Power (555), Transmission of Electricity by Others (565), Administrative and General Expense (920-935), Depreciation Expense (403MP), Amortization Expense (404IP, 404MP), Taxes Other Than Income (408), Deferred Income Tax Expense (41010, 41110), Schedule M, Federal Income Tax True-Up (40910), General Plant (389-399), Intangible Plant (303), Plant Held for Future Use (105), Fuel Stock (151, 152), Working Capital – Mining related (25316, 25317, 25319), Materials and Supplies (154), Prepayments – Mining related (165), Misc. Regulatory Assets – Mining Related (182M), Misc. Deferred Debits – Mining related (186M), Accounts Payable (232), Other Deferred Credits Misc. (25330, 230, 25399), ARO Regulatory Liability (254105), SO Emissions (25398), Regulatory Liabilities (254), Accumulated Deferred Income Taxes (190, 282-283), General Plant Accumulated Depreciation 108GP, Accumulated Provision for Amortization (111IP, 111MP)

Accounts using SE factor after Interim period: System Control & Load Dispatch (556), Other Expenses (557), Transmission of Electricity by Others - GRID Management Charge (565)

System Generation Factor ("SG") – Effective during the Interim Period

```
SG_i = 0.75 * SC_i + 0.25 * SE_i where:

SG_i = System Generation Factor for jurisdiction i.

SC_i = System Capacity Factor for jurisdiction i.

SE_i = System Energy Factor for jurisdiction i.
```

The SG factor is used to allocate generation and transmission costs. It is calculated using a weighting of 75% of the SC factor and 25% of the SE factor for a jurisdiction.

Accounts using the SG factor: Sales for Resale (447), Provision for Rate Refund (449), Other Electric Operating Revenue (453, 454, 456), Miscellaneous Revenue (41160, 41170, 421), Generation Expense (500, 502, 504-514, 517-532, 535-545, 546, 548-554, 555, 556, 557), Transmission Expense (560-564, 566-573, 565), Administrative and General Expense (920-935), Depreciation Expense (403SP, 403NP, 403HP, 403OP, 403TP, 403GP), Amortization Expense (404SP, 404HP, 404IP 406, 407), Taxes Other Than Income (408), Deferred Income Tax Expense, (41010, 41110), Schedule M, Renewable Energy Tax Credit (40911), Federal Income Tax True-Up (40910), Generation Plant (310-316, 320-325, 330-336, 340-346), Transmission Plant (350-359), General Plant (389-398, 1011390), Intangible Plant (302-303), Plant Held for Future Use (105), Electric Plant Acquisition Adjustments (114-115), Materials and Supplies (154), Working Capital Deposit (25318), Prepayments (165), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (135, 232), Accumulated Misc. Operating Provision Other (22841), Customer Advances for Construction (252), Other Deferred Debits (25399), Accumulated Deferred Income Taxes (190, 281-283), Accumulated Investment Tax Credit (255), Accumulated Depreciation (108SP, 108HP, 108OP, 108TP, 108GP), Accumulated Provision for Amortization (111SP, 111GP, 111HP, 111IP, 111190)

System Generation Factor - Fixed ("SGF") - Effective after Interim Period

Based on actual SG allocation factors for the most recent four calendar years available prior to the end of the Interim Period. The SG_i factor is as defined above.)

$$SGF_i = \frac{\text{PY1}SG_i + \text{PY2}SG_i + \text{PY3}SG_i + \text{PY4}SG_i}{4}$$

where:

SGF_i = **System Generation – Fixed Factor** for jurisdiction i.

Prior Year (PY) 1 SG_i = PY1 System Generation Factor for jurisdiction i. Prior Year (PY) 2 SG_i = PY2 System Generation Factor for jurisdiction i. Prior Year (PY) 3 SG_i = PY3 System Generation Factor for jurisdiction i. Prior Year (PY) 4 SG_i = PY4 System Generation Factor for jurisdiction i.

For Example: If the Interim Period ends December 31, 2023, then (PY) 1 = calendar year 2022, (PY) 2 = calendar year 2021, (PY) 3 = calendar year 2020, and (PY) 4 = calendar year 2019.

Accounts using SGF factor: Intangible Plant (303), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (232), Accumulated Investment Tax Credit (255)

System Gross Plant Distribution Factor ("SGPD") – Effective after Interim Period

$$SGPD_i = \frac{GPD_i}{\sum_{i=1}^{N} GPD_i}$$

where:

SGPD_i = **System Gross Plant Distribution Factor** for jurisdiction i.

GPD_i = Gross plant distribution for jurisdiction i.

N = Number of jurisdictions.

This factor is calculated by taking the ratio of gross distribution plant for a jurisdiction by the total gross distribution plant for all jurisdictions.

There are no accounts allocated using the SGPD factor. This factor is used to calculate the SO factor after the Interim period.

System Net Plant - Distribution Factor ("SNPD")

$$SNPD_i = \frac{PD_i + ADPD_i}{\sum_{i=1}^{N} (PD_i + ADPD_i)}$$

where:

SNPDi = System Net Plant – Distribution Factor for jurisdiction i.

 PD_i = Distribution plant – for jurisdiction i.

 $ADPD_i$ = Accumulated depreciation distribution plant - for jurisdiction i.

N = Number of jurisdictions.

The SNPD factor is used to allocate non situs distribution costs. The factor is calculated as the ratio of net distribution plant for a jurisdiction by the total net distribution plant for all jurisdictions.

Accounts using the SNPD factor: Distribution O&M (580-598), Deferred Income Tax Expenses (41010, 41110), Schedule M, Materials and Supplies – Distribution (154), Accumulated Deferred Income Taxes (190)

System Net Plant Factor ("SNP")

 $ADPG_i$ $ADPI_i$

$$SNP_i = \frac{PP_i + PT_i + PD_i + PG_i + PI_i + ADPP_i + ADPT_i + ADPD_i + ADPG_i + ADPI_i}{\sum_{i=1}^{N} (PP_i + PT_i + PD_i + PG_i + PI_i + ADPP_i + ADPT_i + ADPD_i + ADPG_i + ADPI_i)}$$
 where:
$$SNP_i = System \ Net \ Plant \ Factor \ for jurisdiction \ i.$$

$$PP_i = Production \ plant \ for jurisdiction \ i.$$

$$PT_i = Transmission \ plant \ for jurisdiction \ i.$$

$$PD_i = Distribution \ plant \ for jurisdiction \ i.$$

$$PG_i = General \ plant \ for jurisdiction \ i.$$

$$PI_i = Intangible \ plant \ for jurisdiction \ i.$$

$$ADPP_i = Accumulated \ depreciation \ production \ plant \ for jurisdiction \ i.$$

$$ADPT_i = Accumulated \ depreciation \ distribution \ plant \ for jurisdiction \ i.$$

$$ACCUMULATED \ ACCUMULATED \ depreciation \ distribution \ plant \ for jurisdiction \ i.$$

Number of jurisdictions.
 The SNP factor is used to allocate interest expense and miscellaneous deferred tax treatment. The factor

Accumulated depreciation general plant for jurisdiction i.

Accumulated depreciation intangible plant for jurisdiction i.

Accounts using SNP factor: Interest Expense (427-429, 431, 432), Deferred Income Tax Expenses (41010, 41110), Schedule M, Working Capital – Cash (131), Accumulated Deferred Income Taxes (190, 282, 283)

is calculated by taking the ratio of the system net plant balance for a jurisdiction divided by the total

System Overhead Factor ("SO") – Effective after Interim Period

=

system net plant balance for all jurisdictions.

$SO_i = \frac{SO_i}{C}$	$\frac{C_i + SE_i + SGPD_i}{3}$	
where:	Ü	
SO_i	=	System Overhead Factor for jurisdiction i.
SC_i	=	System Capacity Factor for jurisdiction i.
SE_i	=	System Energy Factor for jurisdiction i.
$SGPD_i$	=	System Gross Plant Distribution for jurisdiction i.

The SO factor is used to allocate system overhead costs. The SO factor used after the Interim period is calculated by taking the sum of the SC, SE and SGPD factor for a jurisdiction and dividing by three.

Accounts using SO factor after Interim period: Other Electric Operating Revenue (451, 454, 456), Miscellaneous Revenue (41160, 41170, 421), Administrative and General Expense (920-935), Depreciation Expense (403GP), Amortization Expense (404GP, 404IP), Deferred Income Tax Expenses (41010, 41110), Schedule M, Federal Income Tax True-Up (40910), General Plant (389-398, 1011390), Intangible Plant (303), Materials and Supplies (154), Stores Expense Undistributed (163), Prepayments (165), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (141, 232), Rate Base Deduction Provisions (2281-2283), Other Deferred Credits (25399), Regulatory Liabilities (254),

Accumulated Deferred Income Taxes (190, 282, 283), Accumulated Depreciation (108GP, 1081390), Accumulated Provision for Amortization (111GP, 111IP)

System Overhead Factor ("SO") – Effective during the Interim Period

so - P	$P_i + PT_i + PD_i +$	$-PG_i + PI_i - PP_{oi} - PT_{oi} - PD_{oi} - PG_{oi} - PI_{oi}$
$SO_i - \frac{1}{\sum_{i=1}^N}$	$(PP_i + PT_i + PD$	$\frac{-PG_{i} + PI_{i} - PP_{oi} - PT_{oi} - PD_{oi} - PG_{oi} - PI_{oi}}{i + PG_{i} + PI_{i} - PP_{oi} - PT_{oi} - PD_{oi} - PG_{oi} - PI_{oi})}$
where:		
SO_i	=	System Overhead Factor for jurisdiction i.
PP_i	=	Gross production plant for jurisdiction i.
PT_i	=	Gross transmission plant for jurisdiction i.
PD_i	=	Gross distribution plant for jurisdiction i.
PG_i	=	Gross general plant for jurisdiction i.
PI_i	=	Gross intangible plant for jurisdiction i.
PP_{oi}	=	Gross production plant for jurisdiction i allocated on a SO factor.
PT_{oi}	=	Gross transmission plant for jurisdiction i allocated on a SO factor.
PD_{oi}	=	Gross distribution plant for jurisdiction i allocated on a SO factor.
PG_{oi}	=	Gross general plant for jurisdiction i allocated on a SO factor.
PI_{oi}	=	Gross intangible plant for jurisdiction i allocated on a SO factor.
N	=	Number of jurisdictions.

The SO factor is used to allocate system overhead costs. The SO factor used during the Interim period is calculated by taking the gross plant allocated to a jurisdiction, excluding the plant amounts allocated on SO, and dividing it by the total gross plant for all jurisdictions, excluding plant amounts allocated on SO, for all jurisdictions.

Accounts using SO factor during the Interim period: Other Electric Operating Revenue (451, 454, 456), Miscellaneous Revenue (41160, 41170, 421), Administrative and General Expense (920-935), Depreciation Expense (403GP), Amortization Expense (404GP, 404IP), Deferred Income Tax Expenses (41010, 41110), Schedule M, Federal Income Tax True-Up (40910), General Plant (389-398, 1011390), Intangible Plant (303), Materials and Supplies (154), Stores Expense Undistributed (163), Prepayments (165), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (141, 232), Rate Base Deduction Provisions (2281-2283), Other Deferred Credits (25399), Regulatory Liabilities (254), Accumulated Deferred Income Taxes (190, 282, 283), Accumulated Depreciation (108GP, 1081390), Accumulated Provision for Amortization (111GP, 111IP)

System Transmission Factor ("ST") – Effective after Interim Period

$ST_i = 75\%$	$*SC_i + 25\% *.$	SE_i
where:		
ST_i	=	System Transmission Factor for jurisdiction i.
SC_i	=	System Capacity Factor for jurisdiction i.
SE_i	=	System Energy Factor for jurisdiction i.

The ST factor is used to allocate transmission related costs after the Interim period. It is calculated using a weighting of 75% of the SC factor and 25% of the SE factor for a jurisdiction.

Accounts using ST factor: Provision for Rate Refund (449), Operating Revenue (454), Other Electric Revenue (456), Miscellaneous Revenue (41160, 41170, 421), Transmission Expense (560-564, 566-573),

Transmission of Electricity by Others (565), Administrative & General Expense (920-935), Depreciation Expense (403TP, 403GP), Amortization Expense (404IP, 407), Deferred Income Tax Expenses (41010, 41110), Schedule M, Transmission Plant (350-359), General Plant (389-398, 1011390), Intangible Plant (302, 303), Plant Held for Future Use (105), Electric Plant Acquisition Adjustments (114-115), Material and Supplies (154), Prepayments (165), Misc. Regulatory Assets (182M), Misc. Deferred Debits (186M), Working Capital (232), Customer Advances for Construction (252), Other Deferred Credits (25399), Accumulated Deferred Income Taxes (190, 281-283), Accumulated Depreciation (108TP, 108GP), Accumulated Provision for Amortization (111TP, 111GP, 111IP)

Tax Depreciation Factor ("TAXDEPR")

$$TAXDEPR_{i} = \frac{TAXDEPRA_{i}}{\sum_{i=1}^{N} TAXDEPRA_{i}}$$

where:

 $TAXDEPR_i$ = **Tax Depreciation Factor** for jurisdiction i. Tax Depreciation allocated to jurisdiction i.

(Tax depreciation is allocated based on functional pre-merger and post-merger splits of plant using Divisional and System allocations from above. Each jurisdiction's total allocated portion of tax depreciation is determined by its total allocated ratio of these functional pre- and post-merger splits to the total Company tax

depreciation.)

N = Number of jurisdictions.

The TAXDEPR factor allocates depreciation related tax costs.

Accounts using TAXDEPR: Deferred Income Tax Expense (41010) Schedule M, Accumulated Deferred Income Taxes (282)

Trojan Decommissioning Factor ("TROJD")

$$TROJD_i = \frac{ACCT22842_i}{\sum_{i=1}^{N} ACCT22842_i}$$

where:

 $TROJD_i$ = **Trojan Decommissioning Factor** for jurisdiction i.

 $ACCT22842_i$ = Allocated adjusted balance in FERC Account 228.42 (Accumulated

Provision for Decommissioning Trojan) for jurisdiction i.

N = Number of jurisdictions.

The TROJD factor is used to allocate decommissioning related costs associated with the Trojan plant.

Accounts using TROJD: Deferred Income Tax Expenses (41010, 41110), Schedule M, FAS 143 ARO Regulatory Liability – Trojan Plant (254105), Asset Retirement Obligation – Trojan Plant (230), Accumulated Deferred Income Taxes (190, 283)

Trojan Decommissioning Fixed Factor ("TROJDF")

Effective after Interim Period Based on actual TROJD allocation factors for the most recent four calendar years available prior to the end of the Interim Period. (The TROJD_i factor is as defined above.)

$$TROJDF_i = \frac{\text{PY1}TROJD_i + \text{PY2}TROJD_i + \text{PY3}TROJD_i + \text{PY4}TROJD_i}{4}$$

where:

TROJDF_i = **Trojan Decommissioning**- **Fixed Factor** for jurisdiction i. Prior Year (PY) 1 TROJD_i = PY1 Trojan Decommissioning Factor for jurisdiction i. Prior Year (PY) 2 TROJDi = PY2 Trojan Decommissioning Factor for jurisdiction i. PY3 Trojan Decommissioning Factor for jurisdiction i.

Prior Year (PY) 4 TROJDi = PY4 Trojan Decommissioning Factor for jurisdiction i.

For Example: If the Interim Period ends December 31, 2023, then (PY) 1 = calendar year 2022, (PY) 2 = calendar year 2021, (PY) 3 = calendar year 2020, and (PY) 4 = calendar year 2019. The TROJDF factor is used to allocate decommissioning related costs associated with the Trojan plant.

Accounts using TROJDF: Deferred Income Tax Expenses (41010, 41110), Schedule M, FAS 143 ARO Regulatory Liability – Trojan Plant (254105), Asset Retirement Obligation – Trojan Plant (230), Accumulated Deferred Income Taxes (190, 283)

APPENDIX D

Nodal Pricing Model Memorandum of Understanding

PacifiCorp's Nodal Pricing Model Memorandum of Understanding

Introduction

1. PacifiCorp and the undersigned parties (Parties) enter into this Memorandum of Understanding (MOU) to acknowledge their support, as described below, of PacifiCorp's investment in the development and implementation of a Nodal Pricing Model (NPM) that may be adopted for the calculation of net-power costs (NPC).

Background

- 2. PacifiCorp is a multi-jurisdictional electric utility that is serving customers in California, Idaho, Oregon, Utah, Washington, and Wyoming.
- Generally, PacifiCorp has allocated costs among those states using an interjurisdictional cost allocation methodology.
- 4. PacifiCorp's current inter-jurisdictional cost allocation methodology, the 2017 PacifiCorp Inter-Jurisdictional Allocation Protocol (2017 Protocol), was adopted by the applicable regulatory commissions in Idaho, Oregon, Utah, and Wyoming in 2016, and set a process for developing a new inter-jurisdictional cost allocation methodology through a working group of stakeholders consisting of utility regulatory agencies, customers, and certain others potentially affected by inter-jurisdictional allocation procedures, known as the Multi-State Process Workgroup (MSP Workgroup). Washington has used the West Control Area Inter-Jurisdictional Allocation

]

PacifiCorp anticipates that California will adopt the 2017 Protocol in 2019.

Methodology for the purposes of cost allocations since 2007. California currently uses the Revised Protocol, but a decision on adoption of the 2017 Protocol is pending before the commission.

- Discussions among the MSP Workgroup for the potential extension of the 2017
 Protocol and/or a new inter-jurisdictional cost allocation methodology are being held.
- 6. In late-2017, PacifiCorp presented the MSP Workgroup with a proposal to track NPC through a NPM concept designed to facilitate each state's energy policies and unique resource portfolios while still seeking to maintain the benefits of system dispatch and optimization. PacifiCorp also indicated a potential for the NPM to provide increased dispatch efficiencies.
- 7. PacifiCorp's NPM proposal is to use a third-party day-ahead dispatch model to determine the schedules for each of its generation resources to serve state loads on a least-cost basis, while tracking costs and benefits associated with the different resource portfolios used to serve PacifiCorp's load in each state. PacifiCorp has been in discussions with the California Independent System Operator (CAISO) to provide the day-ahead dispatch model.
- 8. To allow for the anticipated implementation of NPM for potential ratemaking by 2023, PacifiCorp has determined that it must now invest related capital, incur related operations and maintenance expenses, and pay related ongoing grid management charges. Attached as Exhibit A to this MOU is a description of the type of work that PacifiCorp anticipates undertaking. The Parties understand that the list is preliminary and is not intended to be a complete list.

Agreement

9. As described in this MOU, the Parties affirm support for PacifiCorp's reasonable and prudent investment of related capital funds, related operations and maintenance expenses, and the related ongoing grid management charges to develop and implement an NPM. Exhibit B to this MOU is an estimate of the investments and ongoing-costs PacifiCorp anticipates it will make or incur through this effort and an explanation of the anticipated benefits, including cost-savings and compliance with state policy directives impacting resource portfolio decisions. The Parties agree that, based on the information provided by PacifiCorp, PacifiCorp's decision to invest capital funds and pay ongoing grid management charges to develop and implement an NPM is reasonable and prudent. However, the Parties do not necessarily agree that any specific investment or expenditure is reasonable or prudent and the Parties reserve all rights to audit, review, and challenge any specific investment or expenditure as unreasonable or imprudent in appropriate regulatory commission proceedings.

10. The Parties agree the associated grid management costs will be booked in Federal Energy Regulatory Commission (FERC) Account 565, which is included in PacifiCorp's NPC.

NPM related costs will be allocated among the PacifiCorp states as follows²:

² References to "SG Factor" and "SE Factor" in the following table are to the System Generation Factor and the System Energy Factor, respectively, as used in the currently-applicable cost allocation protocol in each state, or any successor factors. References to "Fixed SG Factor" are to a proposed Fixed SG Factor that the Parties currently anticipate may be established as part of a future interstate cost allocation protocol.

	Time Period			
NPM Associated Costs	January 1, 2020 Through the Effective Date of a New Interjurisdictional Cost Allocation Protocol ³	Beginning upon the Effective Date of a New Interstate Cost Allocation Protocol		
CAISO Grid Management Charge	SG Factor	SE Factor		
Capitalized Start-Up Costs for PacifiCorp ESM ⁴	SG Factor	Fixed SG Factor		
Capitalized CAISO Implementation Fee	SG Factor	Fixed SG Factor		
Ongoing Operations and Maintenance Expense	SG Factor	SE Factor		

Otherwise, this MOU shall not limit the positions any Party may take regarding how nodal pricing may be used to allocate costs amongst the states before any applicable state regulatory commission.

11. The Company shall use its best efforts to provide adequate training and documentation regarding the NPM such that Parties may understand, review, and audit NPM-derived NPC. The NPM, however, is based on CAISO FERC-jurisdictional market model to which PacifiCorp does not have and cannot provide access. For regulatory purposes, the Company will retain CAISO advisory schedules and documentation of any decision to materially deviate from those advisory schedules. The Company further agrees to provide training and facilitate access to the Company's forecasting model for any appropriate party for regulatory purposes.

³ The Parties are currently negotiating towards a possible extension of the 2017 Inter-jurisdictional Allocation Methodology (subject to some possible changes), until a future interstate cost allocation protocol becomes effective, which the Parties currently expect may be January 1, 2023 or January 1, 2024.

⁴ PacifiCorp's Energy Supply Management (ESM) is the business unit responsible for scheduling and dispatching PacifiCorp's generation resources to serve retail load and buy/sell in wholesale energy and capacity markets.

The Parties acknowledge that this MOU does not address any other aspect of the 12. on-going negotiations regarding an extension of the 2017 Protocol or a new inter-jurisdictional cost allocation methodology. By executing this MOU, no Party is agreeing to any other issue not agreed to in this MOU.

This MOU may be executed in counterparts and each signed counterpart constitutes 13. an original document.

The obligations of any state agency that is a party to this MOU shall be interpreted 14. in a manner consistent with its statutory authority and responsibilities, and any explanation and support provided in this MOU or in any regulatory proceeding shall be consistent with its statutory authority and responsibility.

This MOU is entered into by each Party on the date entered below such Party's 15. signature.

PACIFICORP

Western Resource Advocates Organization By: Sophie Hayes	Organization By:
Date: 08-20-2019	Date: 8/26/19
Utah Asociation & Every USO	Jdaho Public Utilities Come Organization
By:	By: Jerri Carlock
Date: 8-26-19	Date: 8/26)2019
Bayer - Monsonto Organization	Utan Clean Energy Organization
By: Penfall C. Bucky	By: Hente Hot
Date: 8/26/2019	Date: 8/20/9

Orlegon Public Utility Commission Organization streft	Powder River Basin Resource Council) Organization
By: <u>8000000000000000000000000000000000000</u>	By: Shannon Anderson
Date: 8/24/19	Date: 8/26/17
Wyoming Office of Consumer Advocate Organization	Organization Public Spivia Commission State
By: Stan Welliams	By: 45.13
Date: <u>08/27/2019</u>	Date: 8-26-2019
Alliance of Uledern Energy Consumage Organization	Organization
By Diff	By:
Date: 8/27/19	Date:

Utan Office of Consumer Services Organization	Organization
By: Wille Soch	Ву:
Date: 8-27-19	Date:
Organization	Organization
By:	Ву:
Date:	Date:
Organization	Organization
By:	Ву:
Date:	Date:

Oregon Citizens' Utility Board	
	Organization
By: While POETZ, General Counsel	Ву:
Date: August 28, 2019	Date:
Organization	Organization
Ву:	By:
Data	Date:
Date:	Date.
Organization	Organization
Ву:	Ву:
Date:	Date:

DESIDENTALITIES & TRANSPORT, COMMESSED	WOLVERINE FUELS
Organization SHAFF	0184111411
By: Mak / Van	By: James Wheel
Date: August 24, 2019	Date: 5ept 03, 2019
Organization	Organization
Ву:	Ву:
Date:	Date:
Organization	Organization
Ву:	Ву:
	D
Date:	Date:

EXHIBIT A

Nodal Pricing Model Statement of Work

Introduction

PacifiCorp has requested the CAISO provide a design proposal for a NPM that can be used to clear energy supply and demand bids for the PacifiCorp Balancing Authority Areas (BAA)¹ one day ahead. The CAISO proposes to leverage its existing Day-Ahead Market (DAM) technology platform, the market full network model, and data interfaces available in the real-time Energy Imbalance Market (EIM) to provide the NPM solution. PacifiCorp is currently an EIM Entity participating in the EIM and has already developed systems and data interfaces with the EIM in submitting data and receiving settlement statements. Consequently, the proposed solution would require an expansion of PacifiCorp's bidding, scheduling, and settlement systems for the NPM, while gaining full access to the most advanced security constrained unit commitment tool currently used in the CAISO's DAM.

Nodal Pricing Model

Currently, the CAISO's DAM footprint is limited to the CAISO BAA (CISO). Although supply and demand schedules in the external BAAs are not optimized, they are modeled as fixed in the DAM to produce an accurate market and power flow solution. The CAISO, as the Reliability Coordinator, receives the demand forecast and generation schedules for the next day from EIM BAAs and external BAAs, as well as the Area-To-Area Net Schedule Interchange between BAAs.

For the NPM solution, the CAISO proposes to include in the DAM footprint the PacifiCorp BAAs, i.e. PACW and PACE, which are modeled as individual BAAs in the EIM. Using similar market features and technology optimization algorithm approaches employed in the EIM, the DAM will produce optimal unit commitment and hourly energy schedules for supply resources in PACW and PACE, subject to a power balance constraint for each of these BAAs, in addition to the power balance constraint for CISO and active transmission network constraints in CISO, PACE, and PACW. Energy transfers between PACW and PACE will be optimally scheduled, subject to applicable scheduling limits, whereas the net energy transfer to or from CISO will be fixed at zero, to prevent energy exchange between CISO and PacifiCorp that may impact the CAISO's DAM solution.

As an intended standard feature of the DAM, the CAISO will also be able to optimally schedule ancillary services to meet the corresponding requirements in PACW and PACE, by designating these BAAs as separate ancillary services regions with distinct requirements.

The ancillary services are the following:

- Regulation up and down;
- Spinning Reserve; and
- · Non-Spinning Reserve

¹ PacifiCorp operates two BAAs, PacifiCorp East BAA (PACE) and PacifiCorp West BAA (PACW).

All ancillary services have a 10-minute ramping requirement, which is shared among the upward ancillary services. Both Spinning Reserves and Non-Spinning Reserves are contingency reserves, but Non-Spinning Reserve can also be provided by offline resources that can start up within 10 minutes. The upward ancillary services procurement is cascaded so that spin can meet non-spin requirements, and regulation up can meet both spin and non-spin requirements, to minimize the overall procurement cost.

Advisory Pricing

The day-ahead settlement for the NPM is advisory, i.e. not financially binding between PacifiCorp and CAISO. Day-ahead energy and ancillary service prices for PacifiCorp resources will be published in CAISO Market Results Interface for PacifiCorp, but they will not be published in Open Access Same-time Information System (OASIS) in the public domain. Similarly, the publication of Locational Marginal Prices at PACW and PACE pricing nodes (generally referred to as PNodes) will be suppressed in OASIS.

EXHIBIT B

PacifiCorp's Estimated Costs of the Nodal Pricing Model

CAISO Grid Management Charge or Service Fee - \$8 to 10 million per year

Capitalized PacifiCorp Start-Up Costs for Energy Supply Management and Settlement Processing - \$3 to \$5 million with 100% applicable to a future Extended Day-Ahead Market (EDAM)

Capitalized CAISO Implementation Fee – \$1 to \$2 million (based on Energy Imbalance Market, or EIM, implementation fee) one-time cost

Ongoing Operations and Maintenance Expense - \$500,000 - \$700,000 per year

Benefits of the Nodal Pricing Model

The NPM is being developed to allocate actual NPC as states move to unique generation portfolios. The NPM is intended to help preserve the system benefit of operating as a single system.

CAISO's existing technology platform is intended to reduce both schedule and budget risk to quickly implement the NPC allocation methodology that PacifiCorp is seeking to implement based on the NPM solution.

In addition to providing a method to allocate NPC, the NPM potentially offers the following benefits from using the CAISO market optimization tool:

- It provides more granular dispatch information resulting in anticipated operational cost savings.
- It allows PacifiCorp to leverage CAISO's independence as a third party market provider.
- It guarantees that the solution outcome is consistent with the CAISO EIM market solution since it is using the same exact tool and input data.
- It leverages the effort and money used to build and maintain a complex and granular Real-time network model that is used in the actual market run.
- It utilizes the same schedule data for internal and external resources informing the potential for unscheduled loop flows and is informative when performing congestion management and potentially enforcing physical flow transmission constraints.

Lastly, if the CAISO offers a Day-Ahead Market to external entities for optional participation, the NPM solution development would allow PacifiCorp to seamlessly participate in the CAISO EDAM, if and when PacifiCorp decides to join that market.

 $\label{eq:appendix} APPENDIX\ E$ Coal-Fueled Interim Period Resource Depreciation Lives

				1			
	In	Depreciation Study Life		2018 Depreciation Study Life		Capacity	Physical
Unit	Service	OR	Other States	PP States (1)	RMP States	(MW)	Location
A	В	С	D	Е	F	G	Н
Lives Addressed by Section 4.1.3.1							
,				Apr-	Apr-		
Cholla 4	1981	2028	2042	25	25	387	Arizona
Colstrip 3	1984	2032	2046	2027	2027	74	Montana
Colstrip 4	1986	2032	2046	2027	2027	74	Montana
Craig 1	1980	2026	2034	2025	2025	82	Colorado
Craig 2	1979	2026	2034	2026	2026	82	Colorado
Lives Addressed by Sections 4.1.3.2 and 4.	1.3.3						
Dave Johnston 1	1959	2023	2027	2023	2027	99	Wyoming
Dave Johnston 2	1960	2023	2027	2023	2027	106	Wyoming
Dave Johnston 3	1964	2023	2027	2023	2027	220	Wyoming
Dave Johnston 4	1972	2023	2027	2023	2027	330	Wyoming
Hunter 1	1978	2029	2042	2029	2042	418	Utah
Hunter 2	1980	2029	2042	2029	2042	269	Utah
Hunter 3	1983	2029	2042	2029	2042	471	Utah
Huntington 1	1977	2030	2036	2029	2036	459	Utah
Huntington 2	1974	2030	2036	2029	2036	450	Utah
Jim Bridger 1	1974	2025	2037	2025	2028	354	Wyoming
Jim Bridger 2	1975	2025	2037	2025	2032	359	Wyoming
Jim Bridger 3	1976	2025	2037	2025	2037	349	Wyoming
Jim Bridger 4	1979	2025	2037	2025	2037	353	Wyoming
Naughton 1	1963	2028	2029	2028	2029	156	Wyoming
Naughton 2	1968	2028	2029	2028	2029	201	Wyoming
Wyodak	1978	2026	2039	2026	2039	268	Wyoming
Lives Addressed by Section 4.1.5							
Hayden 1	1965	2023	2030	2023	2030	44	Colorado
Hayden 2	1976	2023	2030	2023	2030	33	Colorado

⁽¹⁾ The life of coal plants for Washington is addressed in Section 4.1.4.

APPENDIX F

Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding

Introduction

PacifiCorp d/b/a Pacific Power and Light Company (PacifiCorp or Company), Staff of the Washington and Utilities and Transportation Commission (Staff), Public Counsel Unit of the Washington State Attorney General's Office (Public Counsel) and Packaging Corporation of America (PCA), have executed this agreement (the Parties or, individually, a Party) enter into this Memorandum of Understanding (Agreement) to acknowledge their support for certain adjustments to the West Control Area Inter-Jurisdictional Allocation Methodology (WCA).

Background

PacifiCorp is a multi-jurisdictional electric utility that provides services in six states (California, Idaho, Oregon, Utah, Wyoming, and Washington). Staff is participating in PacifiCorp's Multi-State Process (MSP), working towards the Company's goal of developing a common cost allocation methodology amongst these six states. Currently, Washington uses the WCA for determining which costs are eligible for recovery in rates from customers in Washington.¹

As approved by the Washington Utilities and Transportation Commission (Commission), the WCA isolates the costs and revenues associated with assets located in the Company's west "control area" or "PacifiCorp West Balancing Authority Area" (PACW), and allocates to Washington a proportionate share of the costs and revenues based primarily on Washington's relative contribution to demand and energy requirements. The WCA includes loads, generation and transmission assets, and wholesale contracts for facilities located in California, Oregon, and Washington. It also includes transmission and generation assets located outside of California, Oregon, and Washington that are electrically located in PACW. The WCA excludes all loads and assets located within PacifiCorp's East Balancing Authority Area (PACE).

In the context of inter-jurisdictional cost allocation, the Commission will consider a resource to be *used and useful* to Washington customers² if the resource "provides *quantifiable direct or indirect benefits to Washington [ratepayers] commensurate with its costs.*" To modify the WCA methodology, "any changes should be considered in the context of an overall review of that methodology." Additionally, Parties must demonstrate that "any changes proposed more closely aligns with the allocation of costs based on causation[.]" Finally, "the party advocating for the change must make a detailed a persuasive showing demonstrating that the proposed change is appropriate."

¹ Prior to the WCA methodology being approved in Docket UE-061546, PacifiCorp proposed the Revised Protocol as its cost allocation methodology in Docket UE-050684. The Revised Protocol presented costs as an integrated six-state system. The Commission rejected the Revised Protocol because there was not sufficient evidence in the record that the methodology complied with the legal requirements in RCW 80.04.250. *See generally* UE-050684, Order 04.

² See RCW 80.04.250

³ Docket UE-050684, Order 04 ¶ 68.

⁴ Docket UE-130043, Order 05 ¶ 92–94.

⁵ *Id*.

⁶ *Id*.

Foundation for this Agreement

In this memorandum of understanding, the Parties agree to support certain modifications to the WCA in the Company's forthcoming rate case provided the Company can demonstrate that the modifications within this agreement provide beneficial resources to Washington customers that are *used and useful*. In particular, the Parties agree to support these modifications if PacifiCorp can demonstrate these modifications provide quantifiable direct or indirect benefits to Washington customers, and that these benefits are commensurate with their costs. The Parties agree to work collaboratively with PacifiCorp as they make this demonstration. However, as the party advocating for these changes, PacifiCorp bears the legal and factual burden to sufficiently demonstrate that these modifications better align the cost allocation methodology with the principles described above in its forthcoming general rate case.

This demonstration may include the following benefits:

- A diverse generation portfolio, including an increase in high capacity renewable generation.
- Over 170 interconnections with other BAAs and transmission operators providing access to market hubs for wholesale energy transactions (*e.g.*, Mid-C, COB, Mona, Four-Corners and Palo Verde).
- Greater Energy Imbalance Market (EIM) benefits.
- Efficiencies, such as retail load characteristics and variable resource diversity, which minimize operational costs and reduce the need to build for reserves and blackstart capability for each state.
- Washington recently enacted Senate Bill 5116, the Clean Energy Transformation Act (CETA) which, among other things, requires the elimination of coal-fired resources from PacifiCorp's electric rates by December 31, 2025. PacifiCorp's proposed modification to the WCA will facilitate a reasonable path towards PacifiCorp's compliance with CETA.

Based on this understanding, the Parties agree to the following:

Agreement

1. Implementation. This Agreement includes modifications to the WCA subject to approval by the Commission.

⁷ The Commission has stated that <u>one way</u> the Company can demonstrate this is "through <u>historical system operation</u> <u>or modeling of the system showing that Eastside plant costs added to Washington rates would be offset by reductions to other cost categories (e.g., power costs), such that overall costs to Washington ratepayers would be no more than without the Eastside resources." Docket UE-050684, Order 04 ¶ 69 (emphasis added).</u>

⁸ CETA also sets a policy of 100 percent clean energy by 2045. RCW 19.405.050. Additionally, CETA establishes an interim target of 100 percent greenhouse gas (GHG) neutral by 2030, and allows utilities to meet this requirement through 80 percent non-emitting energy and an alternative compliance option, including up to 20 percent unbundled renewable energy credits. RCW 19.405.040.

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 3 of 7

- **1.1.** PacifiCorp will file a rate case that allows for rates to go into effect (after suspension) on or before January 1, 2021. This rate case will use this MOU as the basis for any proposed modifications to the WCA.
- 2. Prudence. The proposed allocation of a particular expense or investment under this Agreement is not intended to and will not prejudge, or prevent any party from taking a position on, the prudence of those costs or the extent to which any particular cost may be reflected in rates. Nothing in this Agreement is intended to abrogate the Commission's right or obligation to: (1) determine fair, just, and reasonable rates based upon applicable laws and the record established in rate proceedings conducted by the Commission; (2) consider the impact of changes in laws, regulations, or circumstances on interjurisdictional allocation policies and procedures when determining fair, just, and reasonable rates; or (3) establish different allocation policies and procedures for purposes of allocating costs and revenues to different customers or customer classes.
- **3. Quantification and Analytical Support.** The Parties agree to work collaboratively and in good faith to agree on the quantification and analytical support necessary for the Company to meet its legal and factual burden.
 - **3.1.** This analysis should be substantially completed before the filing of the general rate case referenced in section 1.1 and with enough time to reasonably allow parties to review the analysis.
 - **3.2.** Before the general rate case referenced in section 1.1 is filed, if a Party determines that the Company's quantification and analytical support does not demonstrate that the Company can meet its legal and factual burden, Parties have the option to withdraw their support from this agreement.
 - **3.3.** After the general rate case referenced in section 1.1 is filed, if a Party determines that this agreement does not result in fair, just and reasonable rates for Washington customers, a party may withdraw from this agreement. The withdrawing Party must provide testimony in the general rate case explaining why this agreement does not result in fair, just and reasonable rates for Washington Customers.
 - **3.4.** In the event of a Party's withdrawal, the remaining Parties may continue to support this Agreement for approval in any proceeding before the Commission.
- **4. System Transmission.** The Parties agree that all existing system transmission costs and benefits will be allocated using the System Generation (SG) factor as specified in Attachment 1.
 - **4.1. Rate Impacts:** To mitigate the immediate overall rate impact to Washington customers in the rate case referenced in Section 1.1, Parties agree to support the framework of the following phase-in approach:

⁹ Existing transmission includes any transmission asset that is in service as of December 31, 2019.

- **4.1.1.** An incremental allocation of one-third of existing transmission costs and benefits, which are not currently allocated to Washington under the current WCA methodology, will be included in the rate case referenced in Section 1.1.
- **4.1.2.** An incremental allocation of an additional one-third of existing transmission costs and benefits, which are not currently allocated to Washington, will be included in a separate tariff rider with a rate effective date on or before January 1, 2022.
- **4.1.3.** An incremental allocation of an additional one-third of existing transmission costs and benefits, which are not currently allocated to Washington, will be included in a general rate case or through an amendment to the separate tariff rider set forth in Section 4.1.2 with a rate effective date on or before January 1, 2023.
 - **4.1.3.1.** The incremental allocation in 4.1.3 will exclude the costs and benefits of all transmission-voltage, radial lines connecting resources not otherwise included in Washington rates to PacifiCorp's interconnected, network transmission system. If PacifiCorp is required to include a portion of a transmission line in its interconnected, network transmission system for open access transmission service due to a subsequent generation or load interconnection, PacifiCorp may request to include such portion of the assets in a subsequent rate case.
- **4.1.4.** The separate tariff rider described above will remain in place until the fully allocated cost of transmission costs as described in Section 4 is included in rates through a general rate case.
- **4.2. New Transmission.** Any new transmission ¹⁰ incremental to the existing transmission described and included in Section 3, will be system-allocated using the SG factor as specified in Attachment 1.
 - **4.2.1.** Similar to the methodology outlined in 4.1.3.1, Transmission which can be demonstrated to be used primarily for the transmission of power from generation assets which are not assigned to Washington under the WCA, as modified by this Agreement, will be excluded from this and any other allocation to Washington.
- **4.3. Analytical Support.** As a part of the analytical support in Section 4, the Company will quantify the differences between total depreciation and ADIT balances using a WCA Allocation of transmission and the system allocation above.

¹⁰ "New" shall constitute assets used and useful for Washington customers after December 31, 2019.

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 5 of 7

- **5. Non-Emitting Resources**. The Parties agree that all existing and new non-emitting resources will be dynamically allocated using the SG Factor specified in Attachment 1.
 - **5.1. Assignment.** If by December 31, 2023, none of the Parties to this agreement have signed a new cost allocation methodology with the Company, then the Company agrees to engage in collaborative conversations with the Parties and other interested Washington stakeholders to explore the following:
 - **5.1.1.** An Assignment method for new resources for the purposes of the WCA; and,
 - **5.1.2.** A methodology to allocate fixed shares of existing non-emitting resources.
- **6. Net Power Costs (NPC).** Forecasted NPC for ratemaking purposes will be consistent with Sections 1,4,5,6, and 7 of this agreement. Additionally, Washington customers will receive all direct and indirect benefits associated with their proportional system-allocated share of existing transmission, including Energy Imbalance Market benefits.
 - **6.1. Actual NPC.** Actual NPC for ratemaking purposes will include only the generation resources included in Washington rates and will be calculated using a spreadsheet.
 - **6.2. Qualifying Facilities.** The costs and benefits of Power Purchase Agreements for Qualifying Facilities (QF PPAs) will continue to be situs assigned to the state having jurisdiction over the QF PPA for cost responsibility, renewable energy credit assignment and resource planning.
- 7. Accelerated Depreciation. PacifiCorp and Staff agree to support a final depreciation date of December 31, 2023, for Bridger Units 1-4, Colstrip 4 and any transmission assets associated solely with the interconnection of these units to the transmission network. This date does not represent a date of estimated closure, changes in operations, or the end of the assignment to Washington of either benefits or costs associated with these plants. Public Counsel and PCA reserve the right to make a recommendation on the depreciation for Bridger Units 1-4, Colstrip, and any transmission assets associated solely with the interconnection of these units to the transmission network in PacifiCorp's forthcoming general rate case.
 - **7.1. Capital Investments.** Washington will continue to be allocated a WCA share of ongoing capital investments expenses for these plants, excluding incremental capital investments that are made primarily for the purpose of extending the life of these plants. Incremental capital investments that are made primarily for the purpose of extending the life of these plants includes, but is not limited to, those associated with achieving compliance with environmental requirements or those necessitated by catastrophic failure.
 - **7.2. Deadline for Removal.** Consistent with RCW 19.405.030, PacifiCorp will remove from Washington rates all costs and benefits associated with Bridger units 1-4 and Colstrip unit 4 no later than December 31, 2025.

- **7.3. Resource Flexibility.** The dates articulated in this section are agreed upon by parties to facilitate the removal of coal from Washington Rates by 2025, and provide the flexibility that may allow for early compliance with CETA.
- **8. Decommissioning Cost.** Washington will continue to be allocated ongoing and expected decommissioning expenses for a WCA share of Jim Bridger Units 1-4 and Colstrip Unit 4.
 - **8.1.** Colstrip Engineering Study. The Company will provide by March 30, 2020, an independent engineering study of estimated decommissioning costs for Colstrip.
 - **8.2. Jim Bridger Engineering Study.** The Company will provide by January 15, 2020, an independent engineering study of estimated decommissioning costs for Jim Bridger.
 - **8.3.** Cost Assignment. To facilitate the allocation of decommissioning costs, Parties agree to support a system allocation of the costs associated with an independent engineering study in 8.1 and 8.2.
- **9.** This agreement proposes modifications to the WCA, which serves as the basis for allocating costs in Washington. PacifiCorp will allocate costs based on the WCA consistent with the modifications in this Agreement for ratemaking purposes in Washington unless a different cost allocation method is approved by the Commission.
- 10. Each Party to this Agreement represents that they are signing this Agreement in good faith and that they intend to abide by the terms of this Agreement.
- **11.** This Agreement may be executed in counterparts and each signed counterpart constitutes an original document.
- 12. Attachment 1 contains updated allocation factors consistent with this Agreement.
- **13.** This Agreement is entered into by each Party on the date entered below such Party's signature.

Exhibit PAC/101 Lockey/1
The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 7 of 7

PACIFICORP	STAFF OF THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
By:	By:
Title:	Title:
Date:	Date:
PUBLIC COUNSEL	PACKAGING CORPORATION OF AMERICA
By:	By:
Title:	Title:
Date:	Date:

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 7 of 7

PACIFICORP	STAFF OF THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
Pro \	D
By:	Ву:
Title: VICE PRESIDENT, REGULATION	Title:
Date: November 22,2019	Date:
PUBLIC COUNSEL	PACKAGING CORPORATION OF AMERICA
Ву:	By: My
Title:	Title: Attorney
Date:	Date: 11/7-7-/19

Exhibit PAC/101 Lockey/1

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 7 of 7

PACIFICORP	STAFF OF THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
By:	By: Mak Viacay
Title:	Title: Dinoto, Regulating Survivo
Date:	Date: Nov. 22, 2019
PUBLIC COUNSEL	PACKAGING CORPORATION OF AMERICA
Ву:	Ву:
Title:	Title:
Date:	Date:

Exhibit PAC/101 Lockey/1

The Washington Inter-Jurisdictional Allocation Methodology Memorandum of Understanding, Page 7 of 7

PACIFICORP	STAFF OF THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
By:	By:
Title:	Title:
Date:	Date:
PUBLIC COUNSEL	PACKAGING CORPORATION OF AMERICA
Ву:	Ву:
Title: _Assistant Attorney General	Title:
Date: 11/21/2019	Date:

APPENDIX G

Special Contracts

Special Contracts without Ancillary Service Contract Attributes

For allocation purposes, Special Contracts without identifiable Customer Ancillary Service attributes are viewed as one transaction.

Loads of Special Contract customers will be included in all Load-Based Dynamic Allocation Factors.

When interruptions of a Special Contract customer's service occur, the reduction in load will be reflected in the host jurisdiction's Load-Based Dynamic Allocation Factors.

Actual revenues received from Special Contract customer will be assigned to the State where the Special Contract customer is located.

See example in Table 1.

Special Contracts with Customer Ancillary Service Attributes

For allocation purposes, Special Contracts with Customer Ancillary Service attributes are viewed as two transactions. PacifiCorp sells the customer electricity at the retail service rate and then buys the electricity back during the interruption period at the Customer Ancillary Service Contract's rate.

Loads of Special Contract customers will be included in all Load-Based Dynamic Allocation Factors.

When interruptions of a Special Contract customer's service occur, the host jurisdiction's Load-Based Dynamic Allocation Factors and the retail service revenue are calculated as though the interruption did not occur.

Revenues received from Special Contract customer, before any discounts for Customer Ancillary Services attributes of the Special Contract, will be assigned to the State where the Special Contract customer is located.

Discounts from tariff prices provided for in Special Contracts that recognize the Customer Ancillary Services attributes of the Contract, and payments to retail customers for Customer Ancillary Services will be allocated among States on the same basis as System Resources.

See example in Table 2.

Buy-through of Economic Curtailment

When a buy-through option is provided with economic curtailment, the load, costs, and revenue associated with a customer buying through economic curtailment will be excluded from the calculation of State revenue requirements. The cost associated with the buy-through will be removed from the calculation of net power costs, the Special Contract customer load associated with the buy-through will be not be included in the calculation of Load-Based Dynamic Allocation Factors, and the revenue associated with the buy-through will not be included in State revenues.

Table 1
Interruptible Contract Without Ancillary Service Contract Attributes
Effect on Revenue Requirement

	Factor		Total system	Jurisdiction	<u>11</u>	Jurisdiction 2	Jui	risdiction 3
1 Loads								
2 Jurisdictional Loads - No Interruptible Service 3 Jurisdictional Sum of 12 monthly CP demand (MW)			72,000	24	,000	36,000		12,000
4 Jurisdictional Annual Energy (MWh)			42,000,000	14,000		21,000,000		7,000,000
5			42,000,000	14,000	,000	21,000,000		1,000,000
6 Jurisdictional Loads - With Interruptible Service - Reflecting Actual Interruptions								
7 Jurisdictional Sum of 12 monthly CP demand (MW)			71,700		,000	35,700		12,000
8 Jurisdictional Annual Energy (MWh) 9			41,962,500	14,000	,000	20,962,500		7,000,000
10 Special Contract Customer Revenue and Load - Non Interruptible Service								
11 Special Contract Customer Revenue		\$	20,000,000			\$ 20,000,000		
12 Special Contract Customer Sum of 12 CPs (MW) (Included in line 2)			900		_	900		-
13 Special Contract Annual Energy (MWh) (Included in line 3)			500,000		-	500,000		-
14	V 500 II		-51-1					
15 Special Contract Customer Revenue and Load - With Interruptible Service (75 MW 16 Special Contract Customer Revenue	X 500 H	ours (of Interruption) 16,000,000			\$ 16,000,000		
17 Discount for Ancillary Services		Ψ	10,000,000			Ψ 10,000,000 -		
18 Net Cost to Special Contract Customer		\$	16,000,000			\$ 16,000,000		
19 Special Contract Sum of 12 CP- Reflecting Actual Interruptions (MW) (Included in I	ine 7)		600		-	600		-
20 Special Contract Annual Energy- Reflecting Actual Interruptions (MWh) (Included in	line 8)		462,500		-	462,500		-
21 22 System Cost Savings from Interruption			\$4,000,000					
23			φ4,000,000					
24 Allocation Factors								
25 No Interruptible Service								
26 SE factor (Calculated from line 4)	SE1		100.00%		.33%	50.00%		16.67%
27 SC factor (Calculated from line 3)	SC1		100.00%		.33%	50.00%		16.67%
28 SG factor (line 27*75% + line 26*25%) 29	SG1		100.00%	33	.33%	50.00%		16.67%
30 With Interruptible Service (Reflecting Actual Physical Interruptions)								
31 SE factor (Calculated from line 8)	SE2		100.00%	33	36%	49.96%		16.68%
32 SC factor (Calculated from line 7)	SC2		100.00%		.47%	49.79%		16.74%
33 SG factor (line 32*75% + line 31*25%)	SG2		100.00%	33	.45%	49.83%		16.72%
34 35								
36 No Intel	rruntih	ی ما	ervice					
37	паршы		CIVICC					
38 Cost of Service								
39 Energy Cost	SE1	\$	500,000,000	\$ 166,666	667	\$ 250,000,000	\$	83,333,333
40 Demand Related Costs	SG1	\$	1,000,000,000	\$ 333,333	333	\$ 500,000,000	\$	166,666,667
41 Sum of Cost		\$	1,500,000,000	\$ 500,000	,000	\$ 750,000,000	\$	250,000,000
42 43 Barrers								
43 Revenues 44 Special Contract Revenue	Situs	\$	20.000.000			\$ 20.000.000		
45 Revenues from all other customers	Situs	\$	1,480,000,000	\$ 500,000	.000	\$ 730,000,000 \$	\$	250,000,000
46	Ontab	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• 000,000	,000	,,	•	200,000,000
47								
48 With Inte	erruptik	ole S	Service					
49								
50 Cost of Service		_					_	
51 Energy Cost	SE2	\$	498,000,000					83,074,173
52 Demand Related Costs 53 Sum of Cost	SG2	\$ \$	998,000,000 1,496,000,000					167,029,289 250,103,462
54		Φ	1,430,000,000	Ψ 500,200	,324	Ψ 145,005,014	Φ	230,103,402
55 Revenues								
56 Special Contract Revenue	Situs	\$	16,000,000			\$ 16,000,000		
57 Revenues from all other customers	Situs	\$	1,480,000,000	\$ 500,206	,924	\$ 729,689,614	\$	250,103,462

Table 2
Interruptible Contract With Ancillary Service Contract Attributes
Effect on Revenue Requirement

	Factor		Total system	Jurisdiction 1		Jurisdiction 2	Jurisdiction 3	
1 Loads								
2 Jurisdictional Loads - No Interruptible Service			72,000	24,000		36,000	12,000	
3 Jurisdictional Sum of 12 monthly CP demand (MW) 4 Jurisdictional Annual Energy (MWh)			42.000.000	14.000.000		21.000.000	7.000.000	
5			42,000,000	14,000,000		21,000,000	7,000,000	
6 Jurisdictional Loads - With Interruptible Service - Reflecting Actual Interruptions								
7 Jurisdictional Sum of 12 monthly CP demand (MW)			71,700	24,000		35,700	12,000	
8 Jurisdictional Annual Energy (MWh)			41,962,500	14,000,000		20,962,500	7,000,000	
9								
10 Special Contract Customer Revenue and Load - Non Interruptible Service		_			_			
11 Special Contract Customer Revenue		\$	20,000,000 900		\$	20,000,000 900		
12 Special Contract Customer Sum of 12 CPs (MW) (Included in line 2) 13 Special Contract Annual Energy (MWh) (Included in line 3)			500,000	-		500.000	-	
14			300,000			300,000		
15 Special Contract Customer Revenue and Load - With Interruptible Service (75 MW	X 500 Ho	ours	of Interruption)					
16 Tariff Equivalent Revenue		\$	20,000,000		\$	20,000,000		
17 Ancillary Service Discount for 75 MW X 500 Hours of Economic Curtailment					\$	(4,000,000)		
18 Net Cost to Special Contract Customer		\$	16,000,000		\$	16,000,000		
19 Special Contract Sum of 12 CP- Reflecting Actual Interruptions (MW) (Included in I			600	-		600	-	
20 Special Contract Annual Energy- Reflecting Actual Interruptions (MWh) (Included in	line 8)		462,500	-		462,500	-	
21 22 System Cost Savings from Interruption			\$4,000,000					
22 System Cost Savings from Interruption 23			\$4,000,000					
24 Allocation Factors								
25 No Interruptible Service								
26 SE factor (Calculated from line 4)	SE1		100.00%	33.33%		50.00%	16.67%	
27 SC factor (Calculated from line 3)	SC1		100.00%	33.33%		50.00%	16.67%	
28 SG factor (line 27*75% + line 26*25%)	SG1		100.00%	33.33%		50.00%	16 67%	
29								
30 With Interruptible Service (Reflecting Actual Physical Interruptions) 31 SE factor (Calculated from line 8)	SE2		100.00%	33.36%		49.96%	16.68%	
32 SC factor (Calculated from line 7)	SC2		100.00%	33.47%		49.79%	16.74%	
33 SG factor (line 32*75% + line 31*25%)	SG2		100.00%	33.45%		49.83%	16.72%	
34	002		100.0070	00.1070		10.0070	10.1270	
35								
36 No Inte	rruptibl	le S	ervice					
37								
38 Cost of Service								
39 Energy Cost	SE1	\$	500,000,000			250,000,000		
40 Demand Related Costs	SG1	\$	1,000,000,000			500,000,000		
41 Sum of Cost		\$	1,500,000,000	\$ 500,000,000	\$	750,000,000	\$ 250,000,000	
42 43 Paranusa								
43 <u>Revenues</u> 44 Special Contract Revenue	Situs	\$	20,000,000		\$	20,000,000		
45 Revenues from all other customers	Situs	\$	1,480,000,000	\$ 500,000,000	\$	730.000,000	\$ 250,000,000	
46		•	.,,,	*,,	•	,,	,,	
47								
48 With Interruptible Service & Ancillary Service Contract								
49								
50 Cost of Service								
51 Energy Cost	SE1	\$	498,000,000			249,000,000		
52 Demand Related Costs	SG1	\$	998,000,000			499,000,000		
53 Ancillary Service Contract - Economic Curtailment (Demand)	SG1	\$	2,000,000			1,000,000		
54 Ancillary Service Contract - Economic Curtailment (Energy) 55 Sum of Cost	SE1	\$ \$	2,000,000 1,500,000,000			1,000,000 750,000,000		
56 Sull of Cost		Ψ	1,300,000,000	Ψ J00,000,000	φ	7 30,000,000	Ψ 230,000,000	
57 Revenues								
58 Special Contract Revenue	Situs	\$	20,000,000		\$	20,000,000		
59 Revenues from all other customers	Situs	\$	1,480,000,000	\$ 500,000,000	\$	730,000,000	\$ 250,000,000	

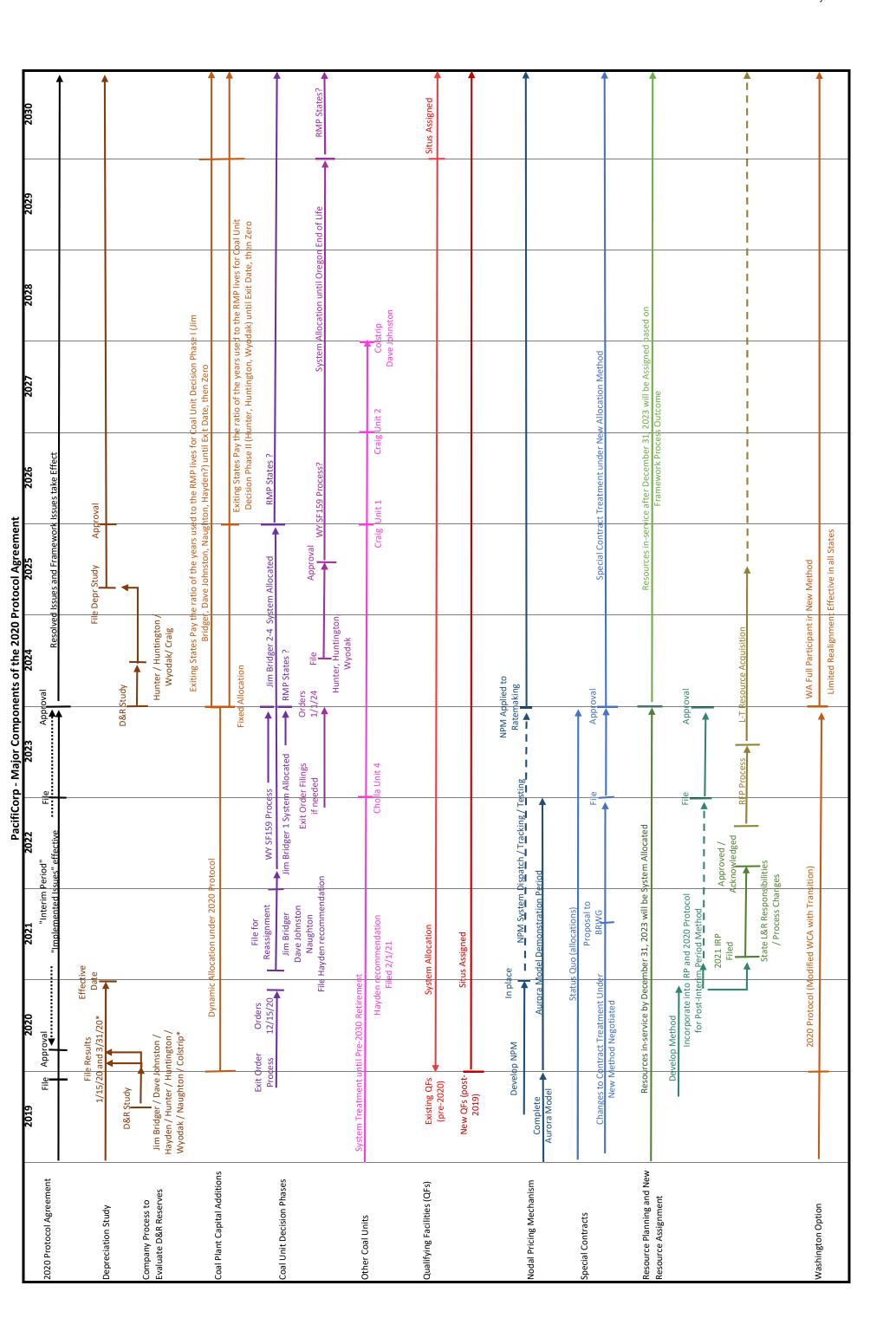
Docket No. UM 1050 Exhibit PAC/102 Witness: Etta P. Lockey

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFICORP

Exhibit Accompanying Direct Testimony of Etta P. Lockey
2020 Protocol Timeline

December 2019



Docket No. UM 1050 Exhibit PAC/200 Witness: Steven R. McDougal BEFORE THE PUBLIC UTILITY COMMISSION **OF OREGON PACIFICORP Direct Testimony of Steven R. McDougal** December 2019

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1		INTRODUCTION
2	Q.	Please state your name, business address and present position with PacifiCorp
3		(the company).
4	A.	My name is Steven R. McDougal, and my business address is 1407 West North
5		Temple, Suite 330, Salt Lake City, Utah 84116. I am currently employed as the
6		Director of Revenue Requirement.
7		QUALIFICATIONS
8	Q.	Briefly describe your educational and professional background.
9	A.	I received a Master of Accountancy degree from Brigham Young University with an
10		emphasis in Management Advisory Services in 1983, and a Bachelor of Science
11		degree in Accounting from Brigham Young University in 1982. In addition to my
12		formal education, I have also attended various educational, professional, and electric
13		industry-related seminars. I have been employed by the company since 1983. My
14		experience at the company includes various positions within regulation, finance,
15		resource planning, and internal audit.
16	Q.	What are your responsibilities as director of revenue requirement?
17	A.	My primary responsibilities include overseeing the calculation and reporting of the
18		company's regulated earnings or revenue requirement, assuring that the inter-
19		jurisdictional cost-allocation methodology is correctly applied, and explaining those
20		calculations to regulators in the jurisdictions in which the company operates.
21	Q.	Have you testified in previous regulatory proceedings?
22	A.	Yes. I have provided testimony before the Public Utility Commission of Oregon
23		(Commission), the California Public Utilities Commission, the Idaho Public Utilities

1		Commission, the Public Service Commission of Utah, the Washington Utilities and
2		Transportation Commission, and the Public Service Commission of Wyoming.
3		PURPOSE OF TESTIMONY
4	Q.	What is the purpose of your testimony in this proceeding?
5	A.	The purpose of my testimony is to support the company's application for approval of
6		the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol (2020 Protocol or
7		Agreement) agreed to among PacifiCorp and the signatories to the 2020 Protocol
8		(referred to individually as a Party or collectively as the Parties). Specifically, my
9		testimony provides details on:
10		• Differences between the 2020 Protocol and the 2017 Protocol;
11		• Implementation of the 2020 Protocol during the Interim Period (January 1,
12		2020 through December 31, 2023);
13		• Issues that are resolved by the 2020 Protocol, but that will not be implemented
14		until after the Interim Period, subject to resolution of the Framework Issues; ¹
15		• Special Contracts as a Framework Issue; ² and,
16		• An explanation of the 2020 Protocol Appendices A, B, C, E, and G.

¹ A process and timeframe to address and attempt to resolve all outstanding issues that the Parties intend to resolve after this 2020 Protocol has been filed with the commissions and during the Interim Period ("Framework"), including the implementation or resolution of issues associated with a Nodal Pricing Model, Resource planning and new Resource Assignment, Limited Realignment, Special Contracts, post-Interim Period capital additions on coal-fueled Interim Period Resources, and other items addressed herein, which are collectively referred to as "Framework Issues."

² As defined in Appendix A to the 2020 Protocol, "Special Contract" means a contract entered into between PacifiCorp and one of its retail customers with prices, terms, and conditions different from otherwise-applicable tariff rates. Special Contracts may provide for a value consideration to the customer to reflect Customer Ancillary Services Contract attributes.

1 COMPARISON OF THE 2020 PROTOCOL TO THE 2017 PROTOCOL 2 Q. What cost allocations have changed from the 2017 Protocol to the 2020 Protocol? 3 Α. Generally for the states that approved the 2017 Protocol, the 2020 Protocol continues 4 with the same allocation treatment with three exceptions: the Embedded Cost 5 Differential (ECD), the Equalization Adjustment, and treatment of qualifying 6 facilities (QF) contracts. I describe the changes to the ECD, while the change to QF 7 contracts is explained in Mr. Michael G. Wilding's testimony and the change in the Equalization Adjustment is explained in Ms. Etta P. Lockey's testimony. Other 8 9 general terms have also been updated and modified in the 2020 Protocol to reflect 10 timing, governance, process, and other matters necessary in developing a new 11 methodology that will ultimately replace the 2020 Protocol at the end of the Interim 12 Period (the period from January 1, 2020 through December 31, 2023). 13 The 2020 Protocol is intended to establish an agreement that incorporates the 14 general allocation concepts being used in the various states today (e.g., 2017 Protocol 15 or the West Control Area Inter-Jurisdictional Allocation Methodology in Washington), 16 modified for immediate issues to be implemented during the Interim Period, while 17 addressing changes needed for a longer-term, more permanent solution. 18 Embedded Cost Differential 19 Q. Was the ECD part of previous allocation methods, including the 2017 Protocol? 20 A. Yes, the ECD has been part of prior allocation protocols in various forms and 21 methods of calculations.

1	Q.	Please explain the changes to the ECD adjustment in the 2020 Protocol.
2	A.	The Fixed ECD, as used in the 2017 Protocol, will continue for Idaho at \$836,000
3		through the end of the Interim Period. The Dynamic ECD, as used in the 2010
4		Protocol, will continue for Oregon through the end of the Interim Period, capped at
5		\$11,000,000. No ECD adjustment exists for Utah or California. In Wyoming, the
6		ECD will terminate December 31, 2020.
7	Q.	What is the Dynamic ECD?
8	A.	The Dynamic ECD measures the embedded cost differentials between the production
9		costs of pre-2005 resources, as defined in the 2010 Protocol, and the production cost
10		of west hydro-electric resources and certain Mid-Columbia Contracts. The first part
11		is computed by taking PacifiCorp's production costs related to pre-2005 resources,
12		expressed in dollars per megawatt-hour, compared to production costs of west-side
13		hydro-electric resources expressed in dollars per megawatt-hour with the difference
14		multiplied by the hydro-electric resources megawatt-hours of production. The second
15		part is computed by taking the differential between the pre-2005 resources' dollars
16		per megawatt-hour compared to Mid-Columbia Contracts' costs on a dollars per
17		megawatt-hour multiplied by the Mid-Columbia Contracts' megawatt-hours.
18		IMPLEMENTED ISSUES
19	Q.	What issues have the Parties agreed to implement under the 2020 Protocol?
20	A.	Subject to certain exceptions, the Parties have agreed that the company's method of
21		allocating costs using the 2017 Protocol through 2019 in all states, except
22		Washington, should continue during the Interim Period. Details on the process and
23		timing for state decisions to exit coal-fueled existing resources and the process for

potential Reassignment³ of coal-fueled Interim Period Resources is explained in the testimony of Ms. Lockey. I provide an explanation of the process for the allocation of decommissioning costs for states exiting coal.

Decommissioning Costs

A.

Q. How will the company treat the decommissioning cost allocation?

There are several scenarios that may play out over time related to plant closures and the treatment of the associated decommissioning costs. For coal-fueled Interim Period Resources with a common operating life across all states, each state shall be allocated its share of actual decommissioning costs based on either an System Generation (SG) Factor (if closed during the interim period) or the Assigned Production (AP) Factor, adjusted for any Reassignment or Limited Realignment impacts (if closed after the Interim Period). This is similar to the treatment today.

If a state exits a resource earlier than other states, its decommissioning costs will be allocated in the same manner as the above and will be based on the latest decommissioning cost estimates established for that resource by the company. To establish more accurate estimates for this purpose, the company is currently undertaking a third-party engineering study to be completed by January 15, 2020, for certain plants, and March 31, 2020, for Colstrip. The company has also committed to undertake another third-party engineering study to update decommissioning costs by June 30, 2024, for certain plants, which will be incorporated into the next depreciation study. These estimates will establish the basis for the Exiting States to

³ "Reassignment, Reassign or Reassigned" means assigning benefits from an Exiting State's share of a coal-fueled Interim Period Resources to those States with Commission orders to accept that cost responsibility allocation for Exiting State's portion of the coal-fueled Interim Resource. See Exhibit PAC/101, 2020 Protocol Appendix A.

determine the final amount they should reserve to cover their liability for plant decommissioning and remediation activities. The estimates also establish a basis for measurement of the decommissioning responsibility between states at the time states actually exit a coal unit while others continue to participate in its operation.

In the situation where a state continues to participate in a coal-fueled resource at its fixed percentage after other states have exited, but it does not accept any reassignment of the resource or limited realignment, then it will be responsible for its fixed percentage share of the resource's actual decommissioning costs.

In the situation where states choose to take a greater allocation of the coalfueled resources through Reassignment or Limited Realignment, the company may,
with the burden of proof and subject to PacifiCorp supporting its proposal in
testimony, propose to allocate to and collect from each state that is participating in
that Resource at the time of Closure that state's share, based on either an SG Factor
(if closed during the Interim Period) or an AP Factor, adjusted for any reassignment or
limited realignment effects (if closed after the Interim Period), of actual
decommissioning costs less the regulatory liabilities for Exiting States including
interest as described in Section 4.3.2 of the 2020 Protocol, and less any difference
between the reserve balance established for each Exiting State and the estimated costs
allocated to each Exiting State as described above.

- Q. Will the differences between decommissioning costs ordered to be included in the reserve balances in states that have issued Exit Orders and the estimated decommissioning costs established for those states be allocated to other states?
- 23 A. No. Such differences will not be allocated to other states.

1	Q.	How will the company account for decommissioning reserve balances when all
2		states do not exit a unit?
3	A.	After an Exit Date by some but not all states, the decommissioning costs reserves
4		allocated to the Exiting State associated with a coal-fueled Interim Period Resource
5		unit, for which that state is exiting, will be accounted for as a reserve account and will
6		be excluded from rate base. Interest will be accrued on that regulatory liability at the
7		company's then-authorized after-tax weighted average cost of capital, not to exceed
8		the maximum carrying charge allowed by applicable law or commission order, for
9		each state that participates in the Reassignment of the exited share of that coal-fueled
10		Interim Period Resource after an Exit Date until the decommissioning work on that
11		unit is completed.
12	Q.	Do all states have the ability to review the decommissioning cost estimates from
13		the company's contractor-assisted engineering studies?
14	A.	Yes. Any Party, at its discretion and cost, may take any actions they deem necessary
15		to review the study results, and may, upon the basis of such a review, take any
16		position they believe to be appropriate. Should a commission determine that an
17		independent evaluator is needed to review the study, the company agrees to initially
18		pay for the independent evaluator, with the ability to seek recovery of those costs.
19		RESOLVED ISSUES
20	Q.	Have certain issues been resolved, subject to implementation after the Interim
21		Period?
22	A.	Yes. The 2020 Protocol addresses the future allocation treatment for certain revenues
23		costs, and investments that would become part of the cost-allocation methodology to

1		be used after the Interim Period (the Post-Interim Period Method). These resolved
2		components of the 2020 Protocol are intended to take effect, conditioned upon
3		resolution of the Framework Issues, such that a new method can go into effect after
4		the Interim Period.
5	Alloc	ation of Generation Costs and Fixed Assignment of New Resources
6	Q.	What does the 2020 Protocol resolve with respect to the allocation of generation
7		costs and revenues for the Post-Interim Period Method, should ongoing
8		negotiations be successful?
9	A.	The 2020 Protocol establishes that the Post-Interim Period Method should assign all
10		Interim Period Resources and new resources to states on a fixed, as opposed to
11		dynamic, basis. To the extent that they are not otherwise assigned through the
12		Reassignment or Limited Realignment process as described in the 2020 Protocol,
13		Interim Period Resources will be assigned per the System Generation-Fixed (SGF)
14		Factor, which will be used to create AP Factors specific to each resource.
15	Q.	How does this differ from the method for allocating generation costs and
16		revenues under the 2017 Protocol and during the Interim Period?
17	A.	During the Interim Period generation costs and revenues will continue to be allocated
18		dynamically among states, based on the SG Factor, which will no longer exist in the
19		Post-Interim Period Method.
20	Q.	How will the SGF Factors be determined?
21	A.	The SGF Factors will be created by taking an average of the four most recent years'
22		SG Factors available at the time the Post-Interim Period Method is filed. More detail
23		on this factor can be found in Appendix C.

1	Q.	When resources are assigned to states on a fixed basis, will the allocation factors
2		for other components of revenue requirement related to the resources change?
3	A.	Yes. Section 5.1.1 of the 2020 Protocol addresses the change from dynamic factors to
4		fixed factors for the allocation of Interim Period Resources and the changes that are
5		necessary to other factors that are interrelated with the Interim Period Resource
6		allocation factors, including accumulated depreciation, accumulated deferred income
7		taxes and excess deferred income taxes, operation and maintenance (O&M) expenses,
8		all generation-related O&M expenses that cannot be allocated to a specific existing
9		resource through an AP Factor, property tax, and all other rate base items associated
10		with Interim Period Resources.
11	Q.	How does the 2020 Protocol define "Post-Interim Period Resources" and how
12		will AP Factors for these resources be determined?
13	A.	Post-Interim Period Resources are resources that begin commercial operation, or with
14		a contract or delivery date, as applicable, after the end of the Interim Period. All
15		Post-Interim Period Resources will be assigned to states on a fixed basis, based on an
16		assignment method to be determined through the Framework Issues process during
17		the Interim Period.
18	Trans	smission Costs
19	Q.	What does the 2020 Protocol resolve with respect to the allocation of
20		transmission costs and revenues for the Post-Interim Period Method should
21		ongoing negotiations be successful?
22	A.	The 2020 Protocol establishes that transmission costs and revenues for the Post-
23		Interim Period Method should be allocated using the System Transmission (ST)

Factor calculated based on a classification of costs as 75 percent demand-related and 25 percent energy-related, and based on 12 monthly Coincident Peaks, using weather-normalized retail peak and energy data, as more thoroughly defined in Appendix C of the 2020 Protocol.

The use of the 75 percent demand / 25 percent energy weighting for allocation

The use of the 75 percent demand / 25 percent energy weighting for allocation of transmission costs is the result of the 2020 Protocol negotiations, and has been consistently used for the allocation of transmission costs since shortly after the 1989 PacifiCorp merger. Company analyses have indicated that a wide range of demand and energy classification methods could be supported on a technical basis, but this method continues to be selected because it produces an overall cost allocation result that is acceptable to all the states.

Distribution Costs

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- Q. What does the 2020 Protocol resolve with respect to the allocation of distribution costs for the Post-Interim Period Method should ongoing negotiations be successful?
- 16 A. The 2020 Protocol establishes that all distribution-related expenses and investments
 17 that can be directly allocated will be directly allocated to the states where the related
 18 distribution facilities are located. Those costs that cannot be directly assigned will be
 19 allocated on the System Net Plant-Distribution Factor.
- Q. Does this differ from the method for allocating distribution costs under the 2017
 Protocol and during the Interim Period?
- 22 A. No.

1	Q.	Can the company reclassify its facilities between transmission and distribution?
2	A.	Yes. The classification of facilities as transmission or distribution depends on how
3		the facility is used, and may change over time. Any such reclassification is generally
4		done following an analysis by the company, using tests adopted by the Federal
5		Energy Regulatory Commission (FERC).
6	Syste	om Overhead Costs
7	Q.	What does the 2020 Protocol resolve with respect to the allocation of system
8		overhead costs for the Post-Interim Period Method should ongoing negotiations
9		be successful?
10	A.	The 2020 Protocol establishes that system overhead costs, i.e. costs which support
11		more than a single function such as generation or transmission, should be allocated on
12		a new System Overhead (SO) Factor that is based on one-third weightings of the
13		System Capacity (SC), System Energy (SE), and System Gross Plant Distribution
14		factors for the Post-Interim Period Method.
15	Q.	How does this differ from the method for allocating system overhead costs under
16		the 2017 Protocol and during the Interim Period?
17	A.	The SO Factor used under the 2017 Protocol and during the Interim Period are based
18		on the ratio of gross plant allocated or situs assigned to each state, excluding that
19		allocated by the SO Factor. Generation and transmission gross plant was allocated
20		using the SG Factor, mining plant on the SE Factor, and distribution plant was
21		directly allocated to the states where the plant was located.
22		The company's proposal for generation resources to be allocated on the SGF
23		Factor or other AP Factor during the Post-Interim Period would make a major

1		component of the SO Factor fixed. However, because administrative and general
2		costs are dynamic, it follows that the allocation of these costs should also remain
3		dynamic.
4		The 2020 Protocol relies on the following weightings to maintain the dynamic
5		nature of the SO Factor: SC Factor by one-third, SE Factor by one-third, and
6		distribution plant by one-third. These ratios approximately align with the demand,
7		energy, and situs plant used for the previous SO Factor cost causation principles.
8	Admi	nistrative and General Costs
9	Q.	What does the 2020 Protocol resolve with respect to the allocation of
10		administrative and general costs for the Post-Interim Period Method should
11		ongoing negotiations be successful?
12	A.	The 2020 Protocol establishes that administrative and general costs, general plant,
13		and intangible plant, both expenses and investments, which can be directly allocated
14		should be directly allocated to the appropriate state or states, and those costs that must
15		be allocated among states should be allocated consistent with Appendix B to the 2020
16		Protocol.
17	Q.	How does this differ from the method for allocating administrative and general
18		costs under the 2017 Protocol and during the Interim Period?
19	A.	It does not; however, different costs may be subject to direct allocation given the
20		fixing of factors, Reassignment, or for other follow-on effects of the implementation
21		of a Post-Interim Period Method.

1	Other	· Allocation Issues
2	Q.	What other allocation issues does the 2020 Protocol resolve for the Post-Interim
3		Period Method?
4	A.	The 2020 Protocol establishes that items included in the company's results of
5		operations, other than those that are specifically called out in the 2020 Protocol,
6		should continue to be allocated on the same factors used in the 2017 Protocol. The
7		FERC account and allocation factor combinations are included in Appendix B to the
8		2020 Protocol, and the algebraic derivation and factor definitions are included in
9		Appendix C.
10	Q.	Are there any changes required to other allocation issues for the sake of
11		consistency with the broader changes contemplated for the Post-Interim Period
12		Method?
13	A.	There are several other allocation issues which need to be addressed to be consistent
14		with the various changes contemplated in the 2020 Protocol. They are specifically
15		addressed in Section 5.6 of the 2020 Protocol and cover various issues for other
16		miscellaneous revenue requirement items.
17	Dema	and-Side Management (DSM)
18	Q.	What does the 2020 Protocol resolve with respect to the allocation of DSM costs
19		and benefits for the Post-Interim Period Method should ongoing negotiations be
20		successful?
21	A.	Costs associated with DSM Programs, including Class 1 DSM Programs, will
22		continue to be directly allocated to the state in which the investment is made. The
23		benefits from these programs will flow back to the state through net power costs or

	Framework Issues process in the development and implementation of a Post-Interim
	Period Method approach to resource planning and new resource assignment.
Q.	Does this method for allocating DSM costs differ compared to the 2020 Protocol
	during the Interim Period?
A.	No.
State	-Specific Initiatives
Q.	How will costs associated with state-specific initiatives be allocated?
A.	Costs and benefits associated with a state-specific initiative will continue to be
	directly allocated to the state adopting the initiative. State-specific initiatives include
	those issues related to the provision of retail electric services to customers in the state
	and include, for example, incentive programs and customer and community energy
	generation programs. State-specific initiatives do not include local fees, taxes, or
	other costs associated with operating transmission and generation facilities within a
	state.
	FRAMEWORK ISSUES-SPECIAL CONTRACTS
Q.	Are there Framework Issues that you wish to address in your testimony?
A.	Yes. Of the Framework Issues generally identified in the policy testimony of Ms.
	Lockey, I will address special contracts in more detail.
Q.	Does the 2020 Protocol change the treatment of the special contracts during the
	Interim Period?
A.	No. During the Interim Period, the treatment applied to special contracts under the
	2017 Protocol will continue to apply. The issue of how special contracts should be
	A. State Q. A. Q. A.

treated after the Interim Period has been designated as a Framework Issue.

Q. Please explain.

2

- 3 Special contracts fall into two categories: those with ancillary service attributes and A. 4 those without. When interruptions occur for special contracts with ancillary services, 5 the host jurisdiction's load-based dynamic allocation factors and retail service 6 revenues are calculated as though the interruption did not occur. For special contracts 7 without ancillary services, the reduction in load will be reflected in the host 8 jurisdiction's load-based dynamic allocation factors and the actual revenues received 9 from the special contract customer will be assigned to the state where the special 10 contract customer is located. Appendix G to the 2020 Protocol provides the details 11 on the appropriate allocation treatment to be applied for the special contracts and 12 explains the two alternative allocation treatments for special contracts under the 2020 13 Protocol during the Interim Period. Because special contracts have the potential of 14 impacting load-based dynamic allocation factors, which will be fixed under the Post-15 Interim Period Method for generation allocations, the approach to special contracts 16 needs to be reconsidered. 17 Q. Does the 2020 Protocol establish a timeframe for developing a proposal to
 - Q. Does the 2020 Protocol establish a timeframe for developing a proposal to resolve the special contracts treatment as part of the Framework Issues process?
- 19 A. Yes. The company is planning to present a proposal to the Framework Issues
 20 workgroup by September 1, 2021, with the intention of incorporating agreement into
 21 the Post-Interim Period Method.

1		2020 PROTOCOL APPENDICES
2	Q.	Please summarize the 2020 Protocol Appendices.
3	A.	The 2020 Protocol has seven appendices as follows:
4		Appendix A—Definitions;
5		Appendix B— Allocation Factors by Account by Revenue Requirement
6		Components;
7		• Appendix C— Definitions of Allocation Factors;
8		Appendix D—Nodal Pricing Model Memorandum of Understanding;
9		Appendix E——Coal-Fueled Interim Period Resource Depreciation Lives;
10		Appendix F—Washington Inter-Jurisdictional Allocation Methodology
11		Memorandum of Understanding; and,
12		Appendix G—Special Contracts.
13		I will provide an explanation of all of the Appendices, with the exception of
14		Appendices D and F, which are addressed by Mr. Wilding.
15	Q.	Please describe Appendix A—Definitions.
16	A.	Appendix A of the 2020 Protocol is a summary of frequently used terms. Rather than
17		defining each term in the 2020 Protocol itself, Appendix A is provided as a quick
18		reference resource for defined terms. Appendix A was reviewed to remove defined
19		terms no longer used or add new terms used in the transition from the 2017 Protocol
20		to the 2020 Protocol.
21	Q.	Please describe Appendix B—Allocation Factors by Account by Revenue
22		Requirement Components.
23	A.	Appendix B is a summary by FERC account of the appropriate allocation factors used

1		to allocate either the costs or revenues recorded to that account. Appendix B has two
2		columns, one for allocation factors to be used during the Interim Period, and a second
3		column for allocation factors to be used during the post-Interim Period. Only minor
4		changes were made to the 2020 Protocol allocation factors in Appendix B from the
5		2017 Protocol during the Interim Period. These changes included removing any
6		account/factor combinations no longer used, or adding new account/factor
7		combinations that have been added since the 2017 Protocol was approved.
8	Q.	Please describe Appendix C—Definitions of Allocation Factors.
9	A.	Appendix C is a summary of the algebraic derivations of the allocation factors used in
10		the 2020 Protocol. The derivations of the factors started with the 2017 Protocol
11		factors, and were updated for factors used during the Interim Period and post-Interim
12		Period. Appendix C also lists the FERC accounts that are used for each of the
13		allocation factors.
14	Q.	Please describe Appendix E—Coal-Fueled Interim Period Resource Depreciation
15		Lives.
16	A,	Appendix E lists the commission-approved depreciable lives in effect October 1,
17		2019, and the company's proposed depreciable lives for coal-fueled resources in
18		pending depreciation dockets as filed in September 2018. Appendix E is provided for
19		informational purposes to assist in the comparison of the depreciable lives of the coal-
20		fueled resources in Section 4 of the Agreement to approved depreciable lives and
21		those proposed in the pending depreciation dockets.
22	Q.	Please describe Appendix G—Special Contracts.
23	A.	Appendix G contains the description how special contracts are treated for cost

1		allocation purposes, which I summarized earlier in my testimony.
2		CONCLUSION
3	Q.	What action do you recommend the Commission take with respect to the
4		Agreement?
5	A.	I recommend that the Commission find that the 2020 Protocol is in the public interest
6		and requests that the Commission approve this Application including all the terms and
7		conditions of the 2020 Protocol in its order in this proceeding.
8	Q.	Does this conclude your direct testimony?
9	A.	Yes.

Docket No. UM 1050 Exhibit PAC/300 Witness: Michael G. Wilding BEFORE THE PUBLIC UTILITY COMMISSION **OF OREGON PACIFICORP** Direct Testimony of Michael G. Wilding December 2019

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1		INTRODUCTION
2	Q.	Please state your name, business address, and present position with PacifiCorp
3		(the company).
4	A.	My name is Michael G. Wilding. My business address is 825 NE Multnomah Street
5		Suite 2000, Portland, Oregon 97232. My title is Director, Net Power Costs and
6		Regulatory Policy.
7		QUALIFICATIONS
8	Q.	Briefly describe your education and business experience.
9	A.	I received a Master of Accounting from Weber State University and a Bachelor of
10		Science degree in accounting from Utah State University. I am a Certified Public
11		Accountant licensed in the state of Utah. During my tenure at the company, I have
12		worked on various regulatory projects including general rate cases, the multi-state
13		process, and net power cost filings. I have been employed by the company since
14		2014.
15	Q.	Have you testified in previous regulatory proceedings?
16	A.	Yes. I have provided testimony before the Public Utility Commission of Oregon
17		(Commission), the California Public Utilities Commission, the Idaho Public Utilities
18		Commission, Public Service Commission of Utah, the Washington Utilities and
19		Transportation Commission, , and the Public Service Commission of Wyoming.
20		PURPOSE OF TESTIMONY
21	Q.	What is the purpose of your testimony in this proceeding?
22	A.	The purpose of my testimony is to support the company's application for approval of
23		the 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol (2020 Protocol or

Agreement) agreed to among PacifiCorp and the signatories to the 2020 Protocol (referred to individually as a Party or collectively as the Parties). I provide details on changes from the 2017 Protocol to the 2020 Protocol that affect net power costs (NPC) during the Interim Period (defined as January 1, 2020 through December 31, 2023), as well as describe the need to track NPC differently in the future. I also support Appendix F of the 2020 Protocol, the Washington Inter-Jurisdictional Allocation Methodology (WIJAM) Memorandum of Understanding (MOU). Specifically, my testimony provides additional details on:

- The change from the 2017 Protocol to the 2020 Protocol as it pertains to the
 treatment of qualifying facilities (QF) purchase power agreements (PPAs),
 especially the treatment of new QF PPAs entered into after

 December 31, 2019, and how the situs assignment of costs will be determined
 during the Interim Period before implementation of the Nodal Pricing Model
 (NPM);
- The need to develop the NPM, the description of the NPM, and the MOU among the Parties that supports the company's investment in the development of the NPM (Appendix D to the 2020 Protocol); and
- The development of an agreement between the company and certain parties
 representing interests in Washington related to modifications to the West
 Control Area Inter-Jurisdictional Allocation Methodology (WCA) and the
 resulting MOU that is included in the 2020 Protocol as Appendix F.

Direct Testimony of Michael G. Wilding

¹ See Appendix A of the 2020 Protocol. Post-Interim Period Method means the resolution of the Framework Issues combined with the Implemented Issues and the Resolved Issues and results in the new allocation methodology for PacifiCorp's six states after the Interim Period.

TREATMENT OF QFs

1

2	Q.	Please explain the change in treatment for existing QF PPAs from the 2017		
3		Protocol?		
4	A.	The 2020 Protocol distinguishes between existing QF PPAs that are executed by		
5		December 31, 2019, or where a legally enforceable obligation exists before that date,		
6		and new QF PPAs that are executed after December 31, 2019. Existing QF PPAs will		
7		continue to be system allocated, similar to the treatment that was applied under the		
8		2017 Protocol. ² As part of the Post-Interim Period Method, if resolved and approved,		
9		the existing QF PPAs will be situs assigned to the respective states with jurisdictions		
10		over the QF PPAs (State of Origin) after 2029.		
11	Q.	Why do the existing QF PPAs change from system allocation to situs assignment		
12		after 2029?		
13	A.	Historically, the company has procured generation resources to serve the energy and		
14		capacity needs of its entire system, and allocated the cost of resources dynamically		
15		among states. That model is no longer sustainable going forward with states		
16		requiring different generation resources. As a result, a working premise in the Multi-		
17		State Process (MSP) was that states should be responsible for their energy policies		
18		and the associated costs, including prices set for QF PPAs. Existing QF PPAs have		
19		been relied on in integrated resource plans (IRP) in the past and have displaced other		
20		system resources and, therefore, a transition period was agreed to where these		
21		resources would continue as system-allocated resources through 2029, but the		

² Under the WCA in Washington, all QF PPAs are treated as situs assigned to the State of Origin.

1		eventual situs assignment to the State of Origin of the resources after 2029 could be			
2		taken into account for each state in future IRPs.			
3	Q.	How will new QF PPAs be treated under the 2020 Protocol?			
4	A.	New QF PPAs, defined as those contracts fully executed after December 31, 2019,			
5		will be situs assigned to the State of Origin, providing a clear demarcation for the			
6		treatment of new QF PPAs going forward.			
7	Q.	How will the renewal of existing QF PPAs be treated under the 2020 Protocol?			
8	A.	The renewal of an existing QF PPA after December 31, 2019, will result in the QF			
9		PPA being treated the same as a new QF PPA and will be subject to situs assignment			
10		to the State of Origin.			
11	Q.	Does the company have a methodology for situs assigning to the State of Origin			
12		the QF PPA costs?			
13	A.	Yes. During the Interim Period, the company will employ a methodology agreed to			
14		as part of the 2020 Protocol. Any cost of a new QF PPA above a reasonable energy			
15		price should be the responsibility of the State of Origin. Correspondingly, any			
16		incremental benefits above the energy output of a new QF PPA such as renewable			
17		energy certificates (RECs) will be situs assigned and allocated to the State of Origin.			
18		The methodologies in determining avoided costs are different in the states that the			
19		company serves, and it would be difficult, if not impossible, to have common avoided			
20		costs to which all new QF PPAs could be compared. As a result, Parties to the 2020			
21		Protocol have agreed to use a generic reasonable energy price to determine whether			
22		the prices of new QF PPAs are higher than the company's avoided costs. Situs			
23		assignment of new QF PPAs during the Interim Period to the State of Origin will be			

approximated by comparing the price of a new QF PPA against the corresponding reasonable energy price, and the costs of a new QF PPA above the reasonable energy price will be situs assigned to the State of Origin.

After the Interim Period, the company anticipates that it will rely on the Nodal Pricing Model (NPM) to determine the amount of cost that should be situs assigned to the State of Origin. The new QF PPAs will be treated the same during the two time periods in that those PPAs will be situs assigned to the State of Origin for cost responsibility, REC assignment, resource planning, and new resource assignments. However, the NPM will not be available for ratemaking at the outset of the Interim Period, and it will not be possible to track the costs and benefits of any particular resources without the NPM.

Q. How is the reasonable energy price determined?

A.

A.

The reasonable energy price is a single blended market price derived from the company's Official Forward Price Curve (OFPC) that was used for setting the QF price for the new QF PPA, scaled for hourly prices. The single blended market price is calculated by applying the appropriate market weighting to the hourly scaled prices from the OFPC for each market hub. The market weighting will be applied by month and by heavy load hours and light load hours.

Q. How will new QF PPAs during the post-Interim Period be treated?

After the Interim Period, the NPM will be implemented for ratemaking purposes and the costs and benefits of the new QF PPAs will be tracked in the same manner as the costs and benefits of other resources assigned to states. At that time, the need to make adjustments based on a reasonable energy price will no longer be needed.

1	Q.	Are there any other unique issues or considerations that need to be addressed		
2		with respect to the 2020 Protocol's treatment of QFs?		
3	A.	Yes, the company has agreed to an annual adjustment for Wyoming, which will be		
4		reflected in the base Wyoming Energy Cost Adjustment Mechanism (ECAM) costs,		
5		from January 1, 2021 through December 31, 2029, and will be trued-up in the ECAM		
6		without application of the sharing bands. The value of the annual adjustment will be		
7		\$5 million through 2022, and \$7.175 million from January 1, 2023 until December		
8		31, 2029. The cost of the adjustment will be borne by the company, and not allocated		
9		to other states.		
10	Q.	How is the Wyoming Embedded Cost Differential (ECD) treated in the 2020		
11		Protocol?		
12	A.	The Wyoming ECD expires December 31, 2020, as a result of the 2020 Protocol		
13		Agreement, and corresponds to the start of the Wyoming QF adjustment explained		
14		above.		
15		NODAL PRICING MODEL		
16	Q.	If states have differing generation portfolios in the future, can the company		
17		continue to rely on its past practice of allocating NPC on a system basis?		
18	A.	No. The ability to dynamically allocate NPC in a reasonable manner hinges on a		
19		common resource portfolio on which all states share proportionately in the resources.		
20		It is likely that after the Interim Period, states will no longer participate in a common		
21		resource portfolio. In addition to providing a path for states to have unique resource		
22		portfolios, it is important to maintain the benefits of system dispatch and optimization		
23		as much as practicable. To fairly and reasonably allocate NPC with unique state		

1		resource portfolios while maintaining the benefits of system dispatch and
2		optimization, the allocation methodology for NPC must be changed.
3	Q.	Will a new approach to allocating NPC be developed during the Interim Period?
4	A.	Yes. This is a complex issue, requiring additional time for the company to develop a
5		new system to track the real-time costs of generation based on each state's allocated
6		share of each resource. The additional time during the Interim Period will also allow
7		for further discussions with the Parties relative to the usage and implementation of a
8		new system for ratemaking purposes in the Post-Interim Period Method. The new
9		system is referred to as the Nodal Pricing Model, or NPM.
10	Q.	Will the NPM be used for cost allocations during the Interim Period?
11	A.	No. Per the 2020 Protocol, NPC will continue to be dynamically allocated as they
12		were under the 2017 Protocol, with the exception of the changes previously discussed
13		related to QF PPAs. The NPM is a Framework Issue, as defined in the 2020 Protocol,
14		and will be subject to further development and refinement during the Interim Period.
15		If the Framework Issues are resolved, the NPM will be part of the Post-Interim Period
16		Method to be filed for consideration and approval by the states.
17	Q.	Even though the NPM will not be used for cost allocation purposes during the
18		Interim Period, can it be used for day-ahead setup purposes during that
19		timeframe?
20	A.	Yes, when the NPM is developed and fully operational, the company anticipates that
21		it will be used at a total Company level for day-ahead schedules and commitment
22		decisions, also referred to as day-ahead setup, and capture any co-optimized system
23		efficiencies that the NPM creates.

I	Q.	How does the company intend to use the NPM?			
2	A.	The use of the NPM to allocate NPC is a Framework Issue in the 2020 Protocol,			
3		meaning there are still items to be resolved before the NPM is used to determine NPC			
4		by state. Once the Framework Issues are resolved, the NPM will be used for NPC			
5		allocations in the Post-Interim Period Method. However, during the Interim Period			
6		the company will make best efforts to implement the NPM by January 2021.			
7		Therefore, while the 2020 Protocol is in effect, the company's day-ahead schedule			
8		may be based on the NPM, but NPC will be dynamically allocated for ratemaking			
9		purposes. Parties intend for this period to provide an opportunity for time and			
10		experience with the NPM before it is used for ratemaking as part of the Post-Interim			
11		Period Method.			
12	Q.	What principles did the company establish to evaluate a method for allocating			
13		NPC when the states do not share a common resource portfolio?			
14	A.	The company established five guiding principles for evaluating a NPC allocation			
15		method, namely that it should:			
16		Support individual states' abilities to have a unique resource portfolio mix that			
17		does not adversely impact other states;			
18		 Assign costs to the state(s) that benefit from and/or drive those costs; 			
19		 Provide appropriate incentives and transparency of cost drivers to better 			
20		inform resource decision making;			
21		Maximize the transparency of cost allocation and dispatch decisions; and			
22		Reduce reliance on subjective assumptions.			

1 Q. Please describe the NPM.

12

2 A. The NPM is a tool designed to track NPC by generation resources and by state. The 3 Post-Interim Period Method will no longer dynamically allocate costs among states 4 based on their respective loads. Instead, generation-related costs will follow the 5 assignment of those resources. To develop such a method, PacifiCorp is working 6 with the California Independent System Operator (CAISO) who, acting as a third-7 party vendor, will produce optimal unit commitment and hourly energy schedules for 8 supply resources in the PacifiCorp balancing authority areas using its day-ahead 9 market model. PacifiCorp will use the NPM to track costs and benefits associated 10 with the different resource portfolios used to serve PacifiCorp's load in each state for 11 ratemaking purposes.

- Q. Did the company research alternatives to the NPM?
- 13 A. Yes. The company evaluated alternative methodologies that attempted to fairly
 14 allocate NPC amongst states with unique resource portfolios. However, none of these
 15 methods were consistent with the guiding principles outlined above.
- Q. Why did the company decide to pursue the NPM as opposed to the otheroptions?
- A. The NPM was the only identified method consistent with the guiding principles.

 Additionally, the NPM builds on the company's experience gained through its

 participation in the Energy Imbalance Market (EIM). The EIM dispatches the

 company's system on an intra-hour basis using locational marginal prices (LMP), and

 the NPM will extend a similar concept to the day-ahead setup of the system.

- PacifiCorp will settle the NPM at the state level compared to the balancing area authority in the EIM.
- 3 Q. Please describe conceptually how the NPM will work.
- A. The NPC associated with each generating resource will be assigned to states based on each generating resource's assignment. For example, if a state is assigned 25 percent of a natural gas plant, then it is also assigned 25 percent of the fuel costs associated with that resource, regardless of load. Each resource also receives a credit based on the LMP for its generation, which is also assigned to each state per its assignment of each generating resource. The assigned NPC, less the credit received, will be the states' total NPC.
- 11 Q. Please explain the credit received by each generating resource in more detail.
- 12 A. Each generating resource will receive a credit for the energy it generates or the
 13 reserves it provides, and each state's load will be charged a load aggregated point
 14 (LAP) price.³ The total credits the generating resources receive will equal the dollar
 15 amount that each state's load is charged. This facilitates a transfer of energy between
 16 states at a fair price based on the LMP and preserves the benefits of a system dispatch
 17 and optimization.
- 18 Q. What is the primary benefit associated with the NPM?
- 19 A. NPM provides a method to allocate and track actual NPC even as states move to
 20 unique generation portfolios. The NPM is intended to and is being developed to help
 21 preserve the benefit of operating as a single system while providing states the

³ The LAP price is the weighted average LMP at each load point or node within the LAP.

flexibility to have unique resource portfolios that align with a state's energy policy
and interests.

Q. Are there any secondary benefits associated with the NPM?

A. Yes. In addition to providing a method to allocate NPC among unique resource

portfolios, the NPM potentially provides more granular day-ahead setup information

resulting in potential operational cost savings. The potential operational cost savings

will be the result of a more efficient day-ahead setup and the cost savings will be

embedded in the actual NPC. These potential cost saving will be impossible to

accurately and precisely track as the calculation of such savings would rely on a

counterfactual setup of the system without the NPM.

Q. What are the benefits of partnering with CAISO for the development of the NPM?

A. As the company implements a NPC allocation methodology based on the NPM solution, partnering with CAISO's existing technology platform reduces both schedule and budget risk. Since the day-ahead market in the CAISO is based on the day-ahead LMPs at the nodal level, the company will be able to leverage CAISO's existing day-ahead market model and experience in developing and implementing the NPM. Additionally, partnering with CAISO ensures consistency between the NPM and the EIM dispatch since both will be based on the same underlying full-network model. Even though transfers will not be allowed between the CAISO and PacifiCorp in the NPM, the day-ahead dispatch for both systems will be based on the same model run and could potentially result in a more efficient day-ahead setup that takes into consideration a more accurate power flow solution.

1		Lastly, if the CAISO offers a day-ahead market to external entities for optional
2		participation, the NPM solution development would allow PacifiCorp to seamlessly
3		participate in the CAISO day-ahead market, if and when PacifiCorp decides to
4		participate in that market.
5	Q.	Is development of the NPM with CAISO as the third-party vendor equivalent to
6		PacifiCorp joining CAISO in any way?
7	A.	No. As the third-party vendor, CAISO will provide optimized advisory day-ahead
8		schedules and commitment information only. PacifiCorp will not relinquish control
9		of its transmission assets to CAISO or otherwise be considered as having joined
10		CAISO as the result of engaging CAISO as the third-party vendor for NPM
11		development.
12	Q.	What are the costs associated with the NPM?
13	A.	CAISO will charge PacifiCorp a grid management charge or service fee that is
14		estimated to be between \$8 and \$10 million annually once the NPM is operational
15		beginning in January 2021. Additionally, there will be some initial capital cost and
16		ongoing operations and maintenance expense, such as upgrades for PacifiCorp
17		information technology hardware and software for both regulatory and accounting
18		purposes.
19	Q.	Will the NPM provide both actual and forecast NPC results?
20	A.	No. The NPM will provide a way to assign costs by state on an actual basis. For
21		forecast NPC used in various ratemaking processes, the company will use best efforts
22		to implement a model that can forecast NPC based on the NPM concept, and is
23		currently working with Energy Exemplar to develop the modeling setups and test run

1		a model known as the Aurora Model. During the Interim Period the Aurora Model
2		may be used by the company for forecast analysis of NPC. After the Interim Period,
3		the company intends to propose the use of the Aurora Model for NPC forecasts in
4		applicable ratemaking proceedings.
5	Q.	The company has various NPC mechanisms in the states, which compare actual
6		NPC against a base NPC set by previous filings and/or refresh the base NPC.
7		Please describe how the company will transition from the 2017 Protocol to the
8		2020 Protocol and the Post-Interim Method with the implementation of NPM.
9	A.	For those NPC filings, the 2020 Protocol contemplates using the allocation
10		methodology in place when the NPC were or will be incurred, to align the timing of
11		the actual costs incurred with the applicable allocation method for cost recovery for
12		that period. Section 3.2.1 of the 2020 Protocol includes a table that summarizes the
13		transition period between the 2017 Protocol and the 2020 Protocol for NPC filings. If
14		a Post-Interim Period Method agreement is reached between the Parties, a similar
15		table will be developed to summarize the transition period for NPC filings from the
16		2020 Protocol to the subsequent agreement.
17	Q.	You have discussed NPC as a general term, please describe the components of
18		NPC that will either be dynamically allocated during the Interim Period, or
19		assigned through the NPM under a Post-Interim Period Method.
20	A.	NPC are the variable costs incurred by the company to produce energy less the
21		revenues from wholesale sales. Specifically, NPC includes the amounts booked to the
22		following FERC accounts:
23		Account 447 - Sales for resale

1		Account 501 -	Fuel, steam generation; excluding fuel handling, start-up fuel	
2			(gas and diesel fuel, residual disposal)	
3		Account 503 -	Steam from other sources	
4		Account 547 -	Fuel, other generation	
5		Account 555 -	Purchased power, excluding the Bonneville Power	
6			Administration residential exchange credit pass-through if	
7		:	applicable	
8		Account 565 -	Transmission of electricity by others	
9		NODAL PRICING N	MODEL MEMORANDUM OF UNDERSTANDING	
10	Q.	Please describe the N	PM MOU executed by the Parties and provided as	
11		Appendix D to the 20	20 Protocol.	
12	A.	The NPM MOU sets out the company's proposal for a third-party day-ahead dispatch		
13		model to determine the schedules for each of its generation resources to serve state		
14		loads on a least-cost basis, while tracking costs and benefits associated with the		
15	different resource portfolios used to serve PacifiCorp's load in each state. The MOU			
16	lists the CAISO as the third party that will develop the tool, the scope of work, and			
17	costs of the work identified by the CAISO, as well as CAISO's estimated costs and			
18	benefits of the work. The MOU also provided an explanation of the anticipated			
19		benefits, including cos	t-savings and compliance with state policy directives impacting	
20		resource portfolio deci	sions. Based on the information provided by the company,	
21		Parties agree that the c	ompany's decision to invest capital funds and pay ongoing grid	
22		management charges to	o develop and implement an NPM is reasonable and prudent.	
23		The MOU was signed	by 17 parties, including the company, regulatory agencies,	

1		consumer advocates, and other interested parties from Idaho, Oregon, Utah,
2		Washington, and Wyoming. No party to date has indicated their objection to the
3		company's investment to develop the NPM.
4	Q.	Does the NPM MOU address the training for Parties?
5	A.	Yes. The company will use its best efforts to provide adequate training and
6		documentation regarding the NPM such that Parties may understand, review, and
7		audit NPM-derived NPC. The company will also provide training and facilitate
8		access to the company's forecasting model for any appropriate party for regulatory
9		purposes.
10	Q.	Are the Parties to the 2020 Protocol asking the Commission to approve the use of
11		the NPM at this time?
12	A.	No. As indicated previously, the NPM is a Framework Issue as defined in the 2020
13		Protocol, and the process and timeframe for developing NPM is what is before the
14		Commission for consideration, not the method itself. Once the NPM is fully
15		developed and agreed to by Parties, a subsequent filing will be made for approval of
16		the end result of the Framework Issue process and the implementation of a Post-
17		Interim Period Method.
18	W	ASHINGTON INTER-JURISDICTIONAL ALLOCATION METHODOLOGY
19		MEMORANDUM OF UNDERSTANDING
20	Q.	Please describe Appendix F to the 2020 Protocol.
21	A.	Appendix F is a MOU between the company, the Washington Utilities and
22		Transportation Staff, Washington Public Counsel, and the Packaging Corporation of
23		America and represents an agreement on modifications to the WCA. The new

- 1 Washington allocation method, as outlined in Appendix F, is referred to WIJAM.
- 2 Q. Please explain the purpose of the WIJAM MOU.
- 3 The purpose of the MSP process was to find an approach to inter-jurisdictional cost A. 4 allocations that would result in a long-term methodology that meets the needs of all of 5 the states that PacifiCorp serves. Currently, Washington uses the WCA method while 6 other states rely on the 2017 Protocol. The 2020 Protocol establishes the umbrella 7 approach under which Washington continues to use the WCA as adjusted by the 8 WIJAM. Similarly, other states continue to use the 2017 Protocol as amended by the 9 2020 Protocol, while working on resolving the Framework Issues in the agreement to 10 deliver the same solutions for all states that allow for a permanent, durable long-term 11 solution to inter-jurisdictional cost allocations. The WIJAM addresses issues that 12 would move certain allocations from a divisional treatment to a system treatment if 13 certain conditions are met, and creates a path forward for compliance with 14 Washington Senate Bill 5116, the Clean Energy Transformation Act.
- 15 Q. Does the WIJAM MOU apply to Washington only?
- 16 A. Yes.
- Q. Does the WIJAM MOU impact other states during the Interim Period or shift costs to other states?
- A. No. When allocating costs for the other five states using the 2020 Protocol, the
 company allocates all of the costs across all six states. To the extent that a difference
 exists between Washington's share under that approach and the WIJAM, that is a risk
 for the company, not other states. The company's long-term objective is to be able to
 serve the states with least-cost, risk-adjusted resource portfolios that meet their needs

1		and comply with state energy policies, while minimizing or eliminating cost recovery
2		shortfalls due to allocations.
3	Q.	Will Washington parties be participating in the Framework Issues discussions
4		established under the 2020 Protocol?
5	A.	Yes, Washington parties that are signatories to the 2020 Protocol will participate in
6		the Framework Issues Workgroup.
7		CONCLUSION
8	Q.	What action do you recommend the Commission take with respect to the
9		Agreement?
10	A.	The company recommends that the Commission find that the 2020 Protocol is in the
11		public interest and requests that the Commission approve this Application including
12		all the terms and conditions of the 2020 Protocol in its order in this proceeding.
13	Q.	Does this conclude your direct testimony?
14	A.	Yes.