2020 Protocol Overview

Docket No. 19-035-42

Technical Conference

January 23, 2020

PACIFICORP
A BERKSHIRE HATHAWAY ENERGY COMPANY

Summary

- Participants and Activities
  - 35 organizations from PacifiCorp's six service territories participated in a multitude of discussions since 2016, meeting with all stakeholders as well as with individual states' stakeholders

  - Over the three-year period, discussions considered and investigated:
    - Restructuring PacifiCorp through a legal separation
    - One-time reassignment of all coal generation resources (CLEAR)
    - Limited realignment of resources to address individual states
    - Alternatives proposed by parties such as green tariffs or east-side assignment of all coal assets;
    - Phased-in approaches to assigning existing generation resources
    - Performing various sensitivity studies around PacifiCorp's proposals as well as those requested by stakeholders

Summary, cont.

- Outcome – the 2020 Protocol
  - MOU reached on the development of a nodal pricing model
  - Modification of the current allocation methods for the period from 1/1/2020 to 12/31/2023
    - Amended 2017 Protocol for California, Oregon, Idaho, Utah and Wyoming
    - Modified West Control Area ("WCA") allocation method for Washington
  - Resolves significant issues for a future allocation method, subject to resolution of remaining open issues
  - Sets out a process to resolve the remaining issues and finalize a new allocation method ("Post-Interim Period Method") to be effective 1/1/2024 as structured in the 2020 Protocol
  - States that if the Post-Interim Period Method is rejected by commissions in the six states, or if stakeholders cannot agree to a Post-Interim Period Method by the end of the Interim Period, PacifiCorp will propose an alternative allocation method for commissions' consideration
  - Washington MOU establishes transition process from WCA to a system approach

Summary, cont.

- Effective Date of 2020 Protocol: 1/1/2020 – 12/31/2023
- General Structure of the 2020 Protocol
  - Time Periods
    - Interim Period, from 1/1/2020 to 12/31/2023
    - Post-Interim Period, beginning 1/1/2024 (may begin earlier if agreement is reached sooner)
  - Implemented Issues
    - Resolution of these issues have been agreed to by stakeholders and will be implemented during the Interim Period beginning 1/1/2020
    - Detailed discussions begin on Slide 10
  - Resolved Issues
    - Resolution of these issues have been agreed to by stakeholders and will be implemented after the Interim Period
    - Detailed discussions begin on Slide 19
  - Framework Issues
    - Resolution of these issues are to be achieved by the end of the Interim Period and will be implemented after the Interim Period
    - Detailed discussion begin on Slide 22

Summary, cont.

- Expected filings for approval with Commissions
  - Filed in Idaho, Oregon, Utah and Wyoming. Washington approval will be consolidated with the December 2019 rate case filing. Approval in California will be sought in a future rate case filing
  - Approximately 22 signatories to-date
- Application
  - 2020 Protocol Agreement, with seven appendices:
    - Appendix A – Defined Terms
    - Appendix B – Allocation Factors by Account by Revenue Requirement Components
    - Appendix C – Algebraic Derivation of Allocation Factors
    - Appendix D – Memorandum of Understanding Supporting Acquisition and Implementation of Nodal Pricing Model (“NPM MOU”)
    - Appendix E – Commission Approved and PacifiCorp Proposed Depreciable Lives of Coal-Fueled Units
    - Appendix F – Memorandum of Understanding between PacifiCorp and Washington Parties on Limited Modification to West Control Area Allocation Method during the Interim Period (“WA MOU”)
    - Appendix G – Treatment of Special Contracts
  - Testimonies
    - Testimony on policy and development of the 2020 Protocol, sponsored by Joelle R. Steward for Rocky Mountain Power and Etta P. Lockey for Pacific Power.
    - Testimony on resolved revenue requirement determination issues, sponsored by Steven R. McDougal.
    - Testimony on resolved net power cost issues, the NPM MOU and the WA MOU, sponsored by Michael G. Wilding.

Interim Period Allocation Method

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Interim Period Allocation Method

- Interim Period is from 1/1/2020 to 12/31/2023
  - If the Framework Issues are resolved and the Post-Interim Period Method is approved by the Commissions before 12/31/2022, the Interim Period may end on 12/31/2022
  - New Resources that are in-service prior to the end of the Interim Period are considered existing resources (Interim Period Resources) and will be system allocated
    - If the Interim Period is to end in 2022, PacifiCorp will propose that the new generation resources identified by the 2019 Integrated Resource Plan ("IRP") planned to be in service by end of 2023 will be system allocated

- WCA method that is currently used in Washington will continue during the Interim Period, with limited exceptions as identified in the WA MOU
  - Washington will transition to a system allocation method by including in its revenue requirement:
    - Approximately $3m a year incremental revenue requirement to transition in three years to system allocation of existing transmission resources, beginning in 2021
    - System allocation of new transmission that are used and useful to WA customers beginning after 12/31/2019
    - System allocation of revenue requirement of all non-emitting generation resources
    - Accelerated recovery of revenue requirement related to the Jim Bridger plant and Colstrip Unit 4 by 12/31/2023 (costs and benefits of these resources will be removed from rates by 12/31/2025)

Interim Period Allocation Method, cont.

- 2017 Protocol that is currently used in Oregon, Idaho, Utah, Wyoming, and California (approval pending) will continue during the Interim Period, with limited exceptions:
  - Equalization adjustment terminates on 12/31/2019. The impact of this change is a reduction of approximately -$9.1m a year to PacifiCorp's revenue requirement

  - Changes to Embedded Cost Differential ("ECD") adjustments are:
    - Fixed ECD adjustment continues for Idaho through end of Interim Period, which is approximately $0.8m a year (cost to customers)
    - Dynamic ECD adjustment continues for Oregon through end of Interim Period and capped at -$11m a year (benefit to customers). The dynamic ECD adjustment for Oregon currently in rates is -$8.8m, and the adjustment reported in the December 2018 Results of Operation was capped at -$10.5m from a calculated value of -$11.6m
    - The fixed ECD and equalization adjustments for California were netted to zero in the 2017 Protocol and the ongoing California ECD is zero with no impact
    - The Wyoming ECD of $1.8m (benefit to customers) ends on 12/31/2020
    - Utah does not have an ECD adjustment

Implemented Issues

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Implemented Issues

Defined as issues that are resolved and to be implemented beginning 1/1/2020

1. Process for states' decisions to exclude costs and benefits of coal-fueled resources from their respective retail rates
   - Exit Date: the last day that the costs and benefits of a coal-fueled resource may be included in rates
   - Exit Order: a Commission's approval of the Exit Date. The date of an Exit Order is expected to be at least four years from the Exit Date
   - PacifiCorp's economic decision to close a coal-fueled unit earlier than previously anticipated does not require an Exit Order
2. Reassignment of coal-fueled resources
   - A process to address reassignment of the costs and benefits of coal-fueled resources from states with Exit Orders to states without exit orders to meet their future generation needs
3. Decommissioning costs
   - A process to ensure adequate accrual for decommissioning by the states that will exit the coal-fueled resources earlier than other states.
4. Power Purchase Agreements ("PPA") with Qualifying Facilities ("QF")
   - Existing QF PPAs: QF PPAs that are fully executed or to which legally enforceable obligations ("LEO") exist on or before 12/31/2019
   - New QF PPAs: QF PPAs that are fully executed or to which LEOs exist after 12/31/2019

More detailed discussions are on the subsequent slides

1. Decision to Exit Coal-Fueled Resources

Commissions may issue exit orders specifying exit dates for a coal-fueled resource in a proceeding for approval of this agreement, a depreciation study docket, a rate case, or other appropriate proceeding. Parties request that any exit order provide at least four-years notice from the exit date to provide the Company and other states time to consider potential reassignment. Exiting states will no longer be allocated any new costs or benefits from the resource after the exit date

A. Coal-fueled resources that have proposed common depreciable lives in all states:
   - Cholla Unit 4
   - Craig Units 1-2
   - Colstrip Units 3-4
     - Depreciable life of Colstrip Unit 4 is 2023 in Washington, while it's 2027 in all other states.

B. Coal-fueled resources that will have Oregon Exit Dates by 2027:
   - Jim Bridger Units 1-4
   - Dave Johnston Units 1-4
   - Naughton Units 1-2

C. Coal-fueled resources that have Oregon Exit Dates by 2029:
   - Hunter Units 1-3
   - Huntington Units 1-2
   - Wyodak

D. Exit Dates of other coal-fueled resources that PacifiCorp will make state-specific recommendations to the Commissions for their treatment as it pertains to Exit Orders:
   - Hayden Units 1-2

2. Reassignment of Coal-fueled Resources

After receiving an Exit Order, PacifiCorp will make filings in the states without Exit Orders to allow the Commissions in those states an opportunity to evaluate whether to authorize additional allocation of costs and benefits as a result of the Exit Order – "reassign" the exiting state's share of the resource

- Filings will include economic analyses of continued operations of the resource, and a range of potential reassignments
- Reassignment of coal-fueled resources will consider the impact of Washington Limited Realignment
- If those states collectively do not agree to reassign 100% of the share released by the Exit Order, PacifiCorp may recommend early unit closure or consolidation for consideration of the Commissions in those states

2. Reassignment of Coal-fueled Resources, cont.

Reassignment processes are different depending on the Exit Dates of the resources

A. For Cholla, Craig, Colstrip
  - Treat as normal system closures and all states responsible for costs
  - Each state continues to be allocated its share of remaining costs of the resources
  - No additional filings necessary as the result of Exit Orders

B. For Bridger, DJ, Naughton
  - Oregon Exit Orders are expected to be issued on or before December 15, 2020. PacifiCorp's filings in the states without Exit Orders are expected to be by February 1, 2021

C. For Hunter, Huntington, Wyodak
  - Oregon Exit Orders are expected to be issued on or before December 31, 2023. PacifiCorp's filings in the states without Exit Orders are expected to be by June 30, 2024

D. For Hayden
  - Recommendation to be made by February 1, 2021
  - Depending on the final decision on depreciable lives of the units, PacifiCorp's filing for reassignment and/or early retirement will follow the schedules discussed above

3. Decommissioning Costs

When states do not share the same depreciable lives of a unit, states with Exit Orders will not be allocated either increases or decreases to decommissioning costs after the Exit Dates. PacifiCorp will provide estimates of terminal decommissioning costs to establish baseline to accrue for decommissioning cost from the states.

- Two decommissioning cost studies are planned:
  - First one was completed by 1/15/2020 (except Colstrip) and will be supplemented in PacifiCorp's currently open depreciation study dockets in the states, and provide estimates for coal-fueled plants:
    - Jim Bridger, Dave Johnston, Hunter, Huntington, Naughton, Wyodak, and Hayden
    - Study on Colstrip's decommissioning cost is expected to complete by 3/31/2020
  - Second one is expected to be completed by 6/30/2024 and be included in PacifiCorp's next depreciation study filings with updated estimates for coal-fueled plants:
    - Hunter, Huntington and Wyodak

- State may authorize independent reviews of PacifiCorp's decommissioning cost studies if they ultimately pay for the costs

- If closure occurs within one year of the agreed dates on joint-owned plants (non-operated, excluding Cholla), Exiting States agree to pay actual decommissioning costs, may elect to take output during the year based on cost effectiveness determination.

3. Decommissioning Costs, cont.

- Estimated decommissioning costs will be allocated to states based on fixed allocation factors, Assigned Production (“AP”) factor

- Recovery of decommissioning costs for states with Exit Orders
  - Exiting state establishes decommissioning responsibility to be accrued
  - Differences between actual and estimated decommissioning costs related to the share of the Existing States may be borne by the state who elects to take additional share of the units. Company must make the case for the additional cost responsibility
  - Shareholders’ risk if not reassigned and accepted by the states

- Accounting for decommissioning costs
  - After the Exit Dates, decommissioning costs accrued by states with Exit Orders will be accounted for as regulatory liability and excluded from rate base after Exit Dates, and accrue interest based on authorized cost of capital for the states without Exit Orders
  - PacifiCorp will propose a process to separately account for costs related to interim retirement and final decommissioning

4. QF PPAs

QF PPA prices are set based on avoided costs, rules and regulations as defined by the states. To limit further impact of QF PPAs in one state on other states, new allocation of QF PPA costs is implemented beginning 1/1/2020

- For existing QF PPAs, executed or with LEO by 12/31/2019
  - Costs and benefits remain system allocated until 12/31/2029
  - Beginning 1/1/2030, costs and benefits will be situs assigned to the states that approved the QF PPAs ("States of Origin")
  - Situs assignment also includes renewable energy credit, and impact for future resource planning

- For new QFs, executed or with LEO beginning 1/1/2020
  - During Interim Period when NPM is not available
    - Costs and benefits of the QF are system allocated. However, price of a QF PPA will be compared against a reasonable energy price, and the QF costs above the cost set by the reasonable energy price will be situs assigned to the States of Origin
    - Reasonable energy price is determined by weighted average of market prices used to set the QF price
  - Post-Interim Period when NPM is implemented
    - Costs and benefits will be situs assigned to the States of Origin

4. QF PPAs, cont.

- Wyoming adjustment
  - Wyoming's QF prices have historically been significantly lower than the average QF prices of all QF PPAs. As a result, PacifiCorp agreed to adjust costs allocated to Wyoming by
    - -$5m each year from 2021 to 2022.
    - -$7.175m each year from 2023 to 2029.
    - Adjustments will flow through Energy Cost Adjustment Mechanism ("ECAM") without sharing bands.
  - The adjustment will not impact revenue requirement in other states.

Resolved Issues

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Resolved Issues

Defined as issues that are resolved and expected to be implemented after the end of Interim Period when all issues are resolved, including Framework Issues

1. Allocation of generation costs
   - Exiting generation resources: resources in service by the end of the Interim Period
   - Costs will be assigned to states based on the 4 year average of the SG factor

2. Fixed assignment of costs of new resources
   - Shares of new resources, both costs and benefits, will be assigned as opposed to system allocated to states. Assignment process will be based on resolution of Framework Issue on resource planning and new resource assignment

3. Transmission costs
   - Costs of transmission are allocated to states based on a new ST factor, which continues to be dynamically determined with a weighting of 75% demand and 25% energy; loads for factors include special contract loads
   - Allocation of costs of new transmission resources may be subject to resolution of Framework Issue on resource planning and new resource assignment

Resolved Issues, cont.

4. System overhead costs
   - Continue to be allocated to states based on the SO factor. However, the determination of the SO factor will change to one third weighting of the SC, SE and SGPD factors.

5. Allocation of other costs
   - Costs of distribution resources remain situs allocated to the states.
   - Costs of demand side management programs remain situs allocated to the states. Benefits of the programs will be returned to states through resource planning and new resource assignment that is part of the Framework Issues.
   - Costs and benefits of state-specific issues remain situs allocated to the states.
   - For all other costs, the allocations generally remain the same as under the 2017 Protocol, except that
     - If the costs can be identified as related to particular generation resources, the costs will be allocated based on fixed AP factors.
     - If the costs can be identified as related to transmission resources, the costs will be allocated based dynamic ST factors.

Framework Issues

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Framework Issues

Defined as issues that may be resolved by the end of Interim Period and, if so, implemented after the end of Interim Period.

1. Resource planning and new resource assignment
   - Maintain system planning while meeting individual states' resource portfolio requirements.
2. Net Power Costs/Nodal Pricing Model ("NPC"/"NPM")
   - NPM tracks NPC by states that no longer share common resource portfolios.
   - Parties signed NPM MOU for PacifiCorp to acquire and implement NPM, which will be developed by CAISO.
   - Expected implementation timeline of NPM:
     - For dispatch, beginning 1/1/2021.
     - Report actual NPC for ratemaking after the Interim Period.
   - Forecast NPC will be determined using the Aurora model based on the same concept of the NPM after the Interim Period.
3. Special contracts with large industrial customers
   - PacifiCorp will present a proposal to stakeholders on treatment of special contracts' load, costs and benefits by 9/1/2021 for implementation after the Interim Period.
4. Limited Realignment
   - A process to reassign generation resources to states to transition coal-fueled resources out of Washington's rates by end of 2025.
     - Chehalis assigned to Washington
     - Washington share of QFs, east side coal and gas realigned to other states

Framework Issues, cont.

5. Straw proposal to allocate and recover Post-Interim Period capital additions to coal-fueled generation resources:

   a. Capital additions for the purpose of extending the lives of the units beyond Exit Dates or following a catastrophic failure are allocated to states based on the AP factors of states without Exit Orders

   b. Capital additions made from 2024 to Exit Dates that are through 2027:
      - For states with Exit Orders, additions are allocated to states based on the AP factors and prorated by the years to Exit Dates and years to the end of longest depreciable lives. For example, a capital addition made in 2024 for a unit with Exit Date and longest depreciable lives as 2025 and 2037, respectively, the percentage prorate is calculated as:

$$\frac{2025 - 2024 + 1}{2037 - 2024 + 1} = \frac{2}{15} = 14.3\%$$

      - For states without Exit Orders, the remaining capital additions are allocated to the states based on the AP factors, including the prorated amount that is not allocated to states with Exit Orders

   c. Capital additions made for coal-fueled resources with Exit Dates after 2027:
      - 2024-2025, additions are allocated to all states based on respective AP factors
      - 2026-Exit Dates, same treatment as b. above

Others

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Other Sections of the 2020 Protocol

2020 Protocol also contains the following sections:

- Allocation to states gain or loss from sales of assets, which will be based on the AP factors.
  - If the sale occurs within 12 months of reassignment of the resource, the gain or loss will be allocated based on what states are allocated/assigned prior to the reassignment.

- Interpretation and governance, which includes
  - Establish Framework Issue Workgroup and aim to achieve resolution of Framework Issues.
  - MSP Workgroup will remain and may convene when issues arise regarding the 2020 Protocol, or cost allocation in general.
  - Commissioner Forum will no longer be required, but as needed.
  - Interdependency of approvals by Commissions in six states without material alteration of the 2020 Protocol.

- Compliance with resource laws
  - PacifiCorp asserts that the 2020 Protocol complies with the requirements of current laws of all six states.

Major Timeline and Next Steps

2019

- 12/3, filed the 2020 Protocol with the Utah Public Service Commission

2020

- 1/1: Equalization adjustment ends
- 1/1: New QF PPAs are tracked separately, costs above the reasonable energy price assigned situs for QF PPAs approved in California, Oregon, Idaho, Utah and Wyoming
- 1/15: Decommissioning cost studies complete for Jim Bridger, Dave Johnston, Hunter, Huntington, Naughton, Wyodak and Hayden units. Results were provided on 1/16 in supplemental filings in the current Depreciation Study cases in all states (conference call held with parties on 1/17 to review the studies)
- 3/31: Decommissioning cost studies complete for Colstrip units. Results will be provided in supplemental filings in the current Depreciation Study cases in all states
- 12/15: Oregon expected to issue Exit Orders of units it intends to exit by 12/31/2027

Major Timeline and Next Steps, cont.

2021

- 1/31: Nodal Pricing Model expected to be implemented for dispatch
- 1/1: Company files for approval of recommendations regarding the operations of Hayden Units 1-2
- 2/1: Company files for approval regarding continued operations and reassignments of units that Oregon is to exit by 12/31/2027
- 9/1: Company provides proposal to Special Contract customers on treatment of their loads, costs and benefits for purpose of cost allocation

2022

2023

- 1/1: Cholla Unit 4 expected to cease operations
- 12/31: Oregon and Washington exit Jim Bridger Unit 1
- 12/31: Oregon expected to issue Exit Orders of units it intends to exit by 12/31/2029

Major Timeline and Next Steps, cont.

2024, Post-Interim Method effective

- 1/1: Adjustment for QF PPAs based on reasonable energy price ends
- 1/1: Fixed shares of generation resources assigned/reassigned to states
- 1/1: Transmission costs continue to be system-allocated based on dynamic factors
- 1/1: Nodal Pricing Model and Aurora model implemented for ratemaking
- 6/30: Company files for approval regarding continued operations and reassignments of units that Oregon is to exit after 12/31/2027 and by 12/31/2029

Major Timeline and Next Steps, cont.

2025
- 12/31: Craig Unit 1 expected to cease operations
- 12/31: Oregon and Washington exit Jim Bridger Units 2-4
- 12/31: Oregon exits Naughton Units 1-2
- 12/31: Washington exits Colstrip Unit 4

2026
- 12/31: Craig Unit 2 expected to cease operations

2027
- 12/31: Colstrip Units 3 and 4 expected to cease operations
- 12/31: Oregon exits Dave Johnston Unit 1-4

2028

2029
- 12/31: Oregon exits Hunter Units 1-3, Huntington Unis 1-2, and Wyodak

2030
- 1/1: all QF PPAs are situs assigned

Agreement with Utah Parties

Additional agreement among Utah Parties to expand Company's integrated resource planning and energy resource procurement analyses:

- Additional Interim Period Resources allocated or assigned (Reassignment) to Utah should be evaluated as a type of resource acquisition decision

- The agreement sets out timeline for conferences and discussions with Utah parties prior to filings with the Commission

- The agreement describes filing requirements for filings with the Commission on Reassignment, including:
  - Cost and benefit analyses of proposals will be from a Utah-specific planning perspective in light of Utah's load and resource balance, in addition to a total system approach,
  - Evaluation of cost and benefit of reassigned resources will be on a unit-by-unit basis, as well as in various economic combinations, and
  - A list of more detailed information regarding assumptions and input data that will be included in the Company's filings with the Commission.