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PUC.FilingCenter@state.or.us

REPORT NAME: Written Report on Environmental Compliance and Transmission Investments for the Second Quarter of 2015

COMPANY NAME: PacifiCorp

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes

If yes, please submit only the cover letter electronically. Submit confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.

If known, please select designation: RE (Electric) RG (Gas) RW (Water) RO (Other)

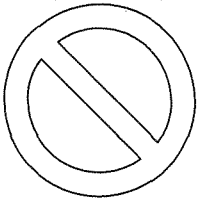
Report is required by: OAR
 Statute
 Order 14-252 and 14-288
 Other

Is this report associated with a specific docket/case? No Yes

If yes, enter docket number: LC 57

List applicable Key Words for this report to facilitate electronic search:
IRP, Environmental Compliance and Transmission Investments

DO NOT electronically file with the PUC Filing Center:



- Annual Fee Statement form and payment remittance or
- OUS or RSPF Surcharge form or surcharge remittance or
- Any other Telecommunications Reporting or
- Any daily safety or safety incident reports or
- Accident reports required by ORS 654.715

Please file the above reports according to their individual instructions.

June 30, 2015

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High St. SE
Salem, Oregon 97301-1166

Attention: Filing Center

**Re: LC 57 -- PacifiCorp's Written Report on Environmental Compliance and
Transmission Investments for the Second Quarter of 2015**

PacifiCorp d/b/a Pacific Power (Company) provides the attached report in compliance with the following provision included in Order No. 14-252, as modified in Order No. 14-288:

"Beginning in the fourth quarter of 2014, PacifiCorp will appear before the Commission to provide quarterly updates on coal plant compliance requirements, legal proceedings, pollution control investments, and other major capital expenditures on its coal plants or transmission projects. PacifiCorp may provide a written report and need not appear if there are no significant changes between the quarterly updates."

As there have been no significant changes since the last quarterly update provided on March 15, 2015, the Company is providing the attached written report. The report consists of an updated PowerPoint slide deck, building upon information provided in the Company's last update, with updates for the following information (these items have been high-lighted in yellow in the report):

- An update on Energy Imbalance Market (EIM), including the latest benefits report from the California Independent System Operator (CAISO), EIM tariff filings and EIM expansion prospects on pages 5-7.
- An overview of the Company's exploration of full participation in a regional independent system operator organization, including benefits, next steps and consideration of existing policies on pages 8-10.
- An update on the Sigurd to Red Butte transmission project on page 11.
- Updates to the environmental compliance timeline on page 16.
- An update on greenhouse gas regulation on page 18.
- Updates to regional haze litigation in Arizona, Colorado and Utah on pages 20-22.
- An update on the Jim Bridger Units 3 and 4 selective catalytic reduction project on page 25.
- An update on mercury emissions control on page 28.
- An update on the Carbon plant status on page 29.

Public Utility Commission of Oregon

June 30, 2015

Page 2

- An update on environmental regulations concerning ash and scrubber waste on page 31.

Please direct informal questions with respect to this report to Erin Apperson, State Regulatory Affairs Manager, at (503) 813-6642.

Sincerely,

A handwritten signature in cursive script that reads "R. Bryce Dalley" followed by the initials "EAA" written to the right of the signature.

R. Bryce Dalley
Vice President, Regulation

Enclosure

PacifiCorp Quarterly Environmental Compliance and Transmission Investment Update

Update for Second Quarter 2015



 **PACIFIC POWER**

Let's turn the answers on.

Quarterly Update Reporting Requirement

- In the final order in the company's 2013 integrated resource plan docket, the Commission ordered the following:

Beginning in the fourth quarter of 2014, PacifiCorp will appear before the Commission to provide quarterly updates on coal plant compliance requirements, legal proceedings, pollution control investments, and other major capital expenditures on its coal plants or transmission projects. PacifiCorp may provide a written report and need not appear if there are no significant changes between the quarterly updates.

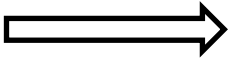
- Information in this slide deck builds on data provided in the company's last quarterly update (March 16, 2015).

*Transmission Projects and EIM
and PacifiCorp - ISO Integration*

Transmission Developments

- EIM Update
- PacifiCorp - ISO Integration
- Transmission Project Development
 - Sigurd to Red Butte
 - Wallula to McNary
 - Energy Gateway Projects

Energy Imbalance Market Update

- The EIM became fully operational November 1, 2014
- California ISO released its EIM Benefits Report covering the **first quarter of 2015**
- Total estimated benefit to the EIM footprint **since November is \$11.23M** and is consistent with the 2013 projected annual benefits 
- Benefits reflect more inter- and intra-regional dispatch in the 15-minute market and reduced renewable energy curtailment

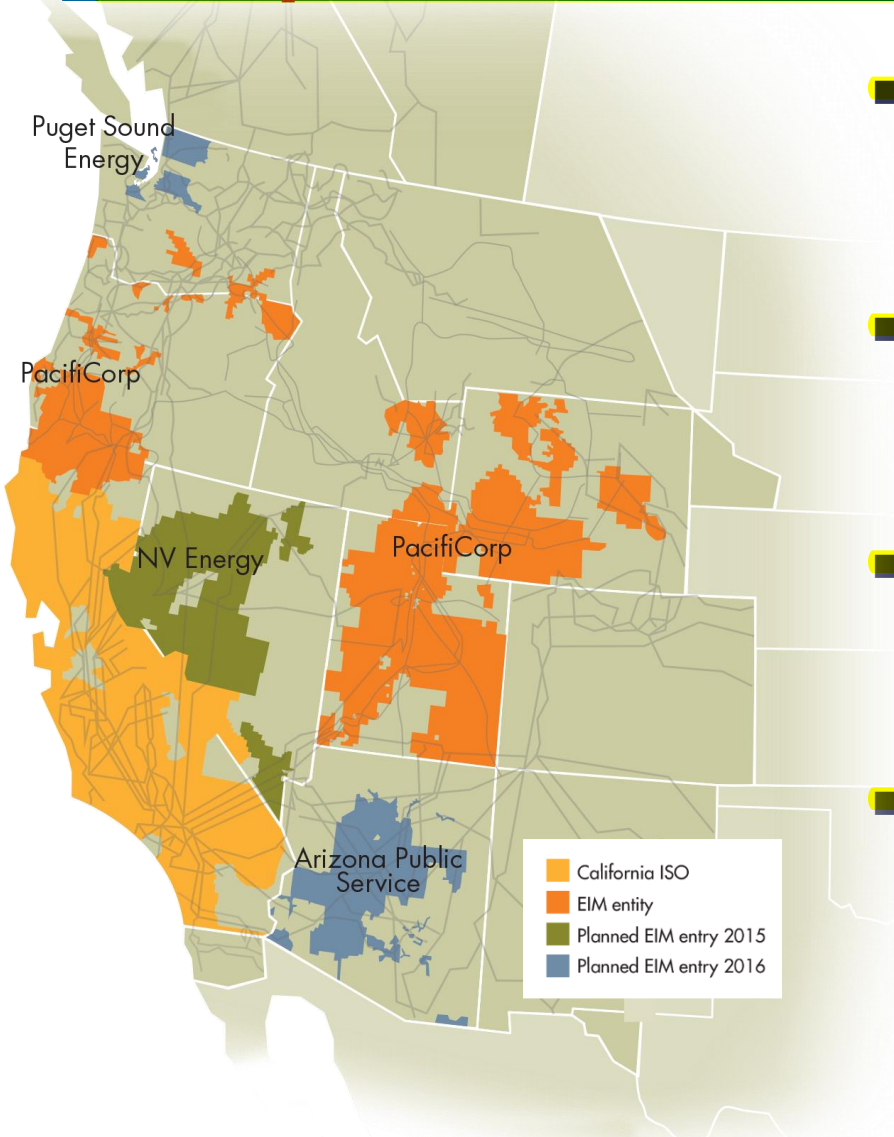
BAA	January	February	March	Total
ISO	\$0.48	\$0.49	\$0.48	\$1.44
PACE	\$0.88	\$0.83	\$0.91	\$2.63
PACW	\$0.42	\$0.49	\$0.28	\$1.19
Total	\$1.78	\$1.81	\$1.67	\$5.26

	ISO/ PacifiCorp study (in millions)	ISO/NV Energy study on incremental benefits (in millions)
annual benefits	\$21.4 - \$129.0	\$9.0 - \$18.0 (2017)
		\$15.0 - \$29.0 (2022)
start-up costs	approx. \$20.0 (\$2.5 to ISO)	approx. \$11.20 (\$1.10 to ISO)
annual on-going costs	approx. \$3.00 (\$1.35 to ISO)	approx. \$2.60 (\$0.75 to ISO)

EIM Tariff Filings and Orders

- FERC granted California ISO's request for pricing waiver for 90 days beginning November 14, 2014
- FERC initiated a Section 206 Investigation to set the record regarding price excursions experienced in PacifiCorp's BAAs
 - Pricing waiver extended to August 24, 2015
 - Technical Conference held April 9, 2015
 - CAISO proposal to resolve price excursion issues
 - CAISO stakeholder process establishing EIM readiness criteria for new EIM Entities
- Coordination with BPA continues related to dynamic transfer capability limits on the COI

Prospects for EIM Expansion



- PacifiCorp is supportive of broader market participation & coordination
- CAISO approach/EIM design is highly scalable for added participation
- NV Energy scheduled to join the EIM starting October 2015
- Puget Sound Energy and Arizona Public Service scheduled to join the EIM starting October 2016

Full participation provides significant benefits beyond those of the Energy Imbalance Market

EIM Benefits

- **Lowers real-time operating costs through 5-minute optimized dispatch**
- **Enhances renewable integration and reduces renewable curtailment**

Full Participation Benefits

- **Lowers costs through optimization of day-ahead system set-up**
- **Enables excess renewable generation to serve larger area**
- **Supports transmission investments that enhance efficiency and renewable integration through regional planning**
- **Captures benefits of load and resource diversity**
- **Greater visibility across the system enhances reliability**
- **Lowers compliance costs**

PacifiCorp's Next Steps

- Benefits study underway
- If decision is made to proceed, full stakeholder and regulatory review and input process
 - ISO stakeholder process
 - PacifiCorp state commission process
 - PacifiCorp's transmission customers and load serving entities in our balancing authority areas
- Followed by FERC filings and PacifiCorp state regulatory approval process
- Engagement over governance of a regional ISO organization

Development of a regional ISO requires careful consideration of existing policies and tariff provisions

Transition agreement

Stakeholder Processes:

- Greenhouse Gas Rules
- Transmission Charges
- Full Network Model and Settlements
- Resource Adequacy Rules
- FERC Filings to address tariff changes
- Governance

Engage on issues with state regulators & regional market participants

Seek regulatory approvals

Implementation design, development, testing, market simulation, and readiness assessment

Regional market implementation

Sigurd to Red Butte (Segment G)



- Placed in-service May 28, 2015
- 170 total line miles constructed
- Costs incurred as of May 2015-\$338m
- Project close-out in progress



Wallula to McNary (Segment A)

- Approximately 30 miles between Wallula-McNary, single circuit 230 kilovolt line
- Satisfies transmission customer service request, increases reliability and load service opportunities
- Oregon certificate of public convenience and necessity received in 2011
- Target in-service date – 2017



Energy Gateway Development

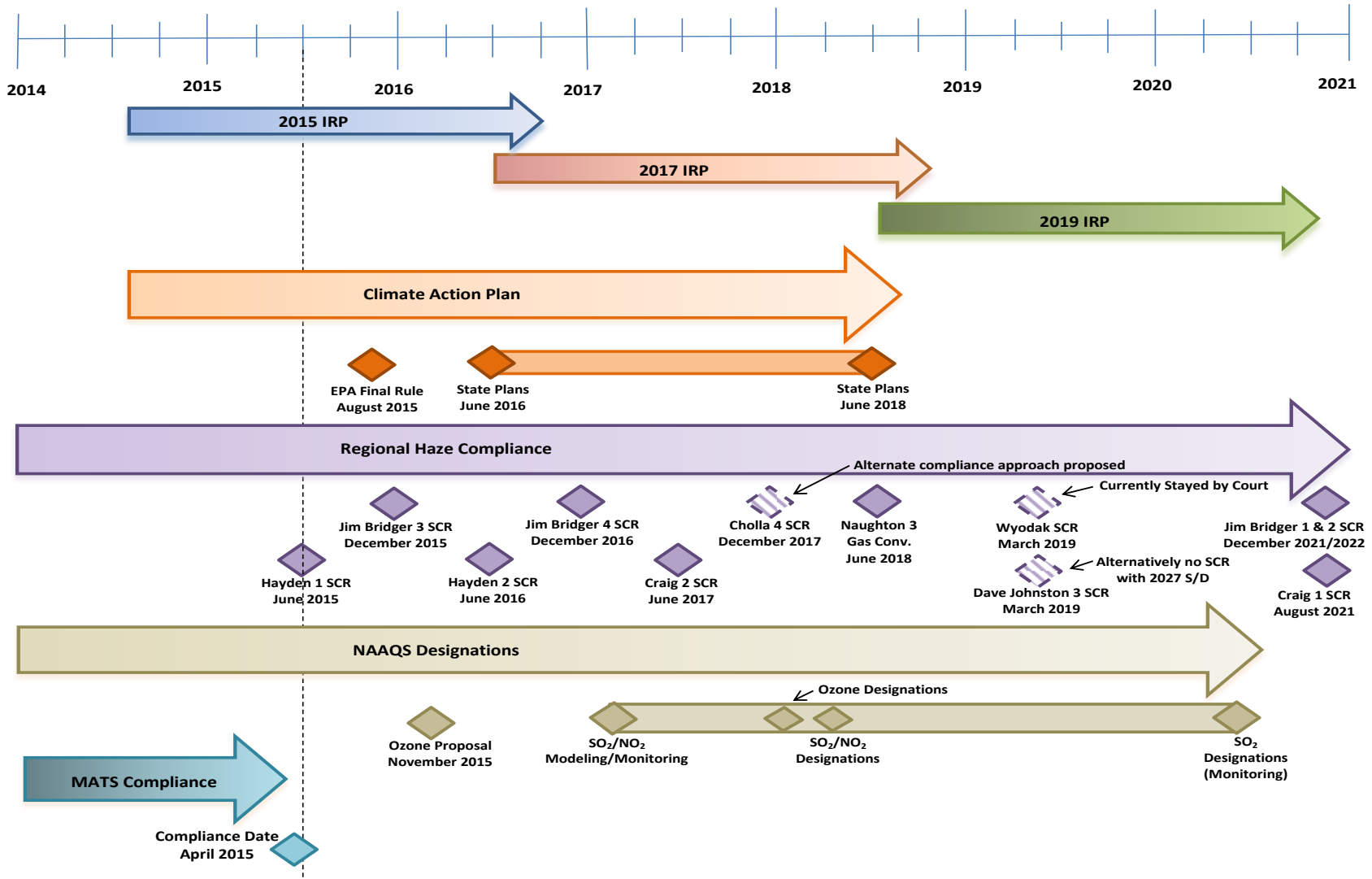
- Gateway West
 - Segment D
 - Segment E
- Gateway South
 - Segment F
- Boardman to Hemingway
 - Segment H



Environmental Compliance Update

Air

Environmental Compliance Timeline



Climate Action Plan

Greenhouse Gas (GHG) Regulation

- The final rules for regulating new, modified or reconstructed, and existing power plants are expected to be finalized in **August 2015**
- Concurrent with the final rule, EPA is expected to issue a proposed federal implementation plan, which states may adopt in lieu of developing a state plan
- **PacifiCorp continues to advocate for implementation of fleet-wide/cross-state, least-cost compliance solutions for customers; not necessarily comprehensive multi-state environmental attribute trading programs**
- **PacifiCorp remains engaged with state agencies and stakeholders, as well as regional entities (e.g., the Western Interstate Energy Board and Center for New Energy Economy) on efforts related to developing potential 111(d) implementation concepts**

Regional Haze Litigation

Arizona Regional Haze Litigation

- The appeals regarding the Cholla plant Regional Haze Federal Implementation Plan (FIP) continue to be held in abeyance while the State of Arizona processes the Cholla plant application for permit and SIP revision, including a BART reassessment
- Once the State of Arizona completes public comment and takes final action on the proposed permit and SIP revision (expected by July 2015), it will forward them to EPA for review and approval
- EPA is expected to complete public comment and take final action on the permit and SIP revision by June 2016
- The Cholla appeal is expected to remain in abeyance until that time, with the parties required to provide status updates to the court every 90 days (first update provided May 21, 2015)

Colorado Regional Haze Litigation

- Various environmental groups appealed EPA action approving SNCR at Craig Unit 1, while PacifiCorp intervened in support of EPA's approval. Other parties intervened as well regarding a variety of appeal points.
- Most of the parties, not including PacifiCorp, entered into a settlement agreement in July 2014 under which, following a series of administrative actions, Craig Unit 1 will be required to install SCR in 2021.
- By order dated July 11, 2014, the court granted motions filed by the environmental groups to hold the appeal in abeyance while the settlement agreement and related administrative actions move forward
- PacifiCorp opposed the settlement agreement and the requirement for Craig Unit 1 to install SCR by 2021. EPA nevertheless approved the settlement after notice and opportunity for public comment.
- The State of Colorado approved a Regional Haze SIP revision consistent with the settlement over the objections of PacifiCorp and subject to final legislative action
- The state of Colorado has forwarded the SIP revision to EPA for review and approval, which is expected to be finalized in 2016

Utah Regional Haze Next Steps

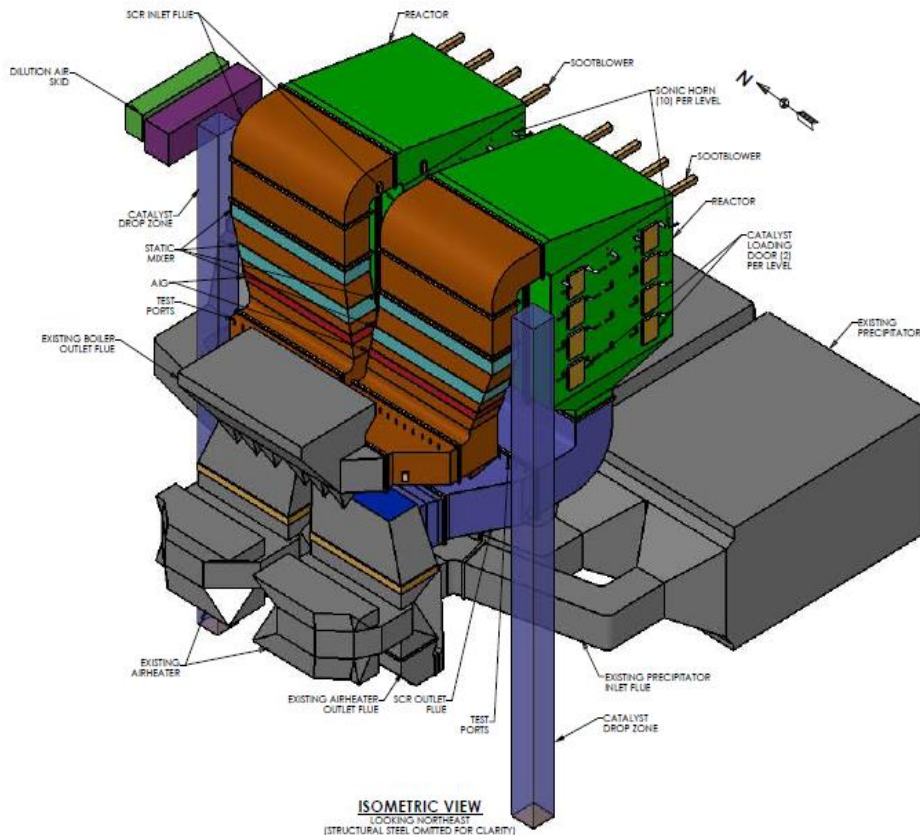
- On June 3, 2015, the Utah Air Quality Board unanimously approved the Utah Division of Air Quality's revised Regional Haze SIP
- With this final approval, the SIP becomes enforceable by the state, and will be forwarded to EPA for its approval
- Once EPA takes its final action, Utah's Regional Haze SIP will become federally enforceable
- EPA is expected to take final action by June 2016

Wyoming Regional Haze Litigation

- PacifiCorp has appealed EPA's action requiring SCR at Wyodak. Other parties have also filed appeals of EPA's final action under a variety of opposition points.
- PacifiCorp and other parties asked the court to stay EPA's final action pending the resolution of the appeals. The court has granted the requested stay.
- Final briefing on the appeal of EPA's final action **was completed in March** 2015, and the parties are waiting for the court to schedule oral arguments.
- The court is expected to make a final decision on the appeal of EPA's final action in 2016.

Regional Haze Compliance Projects

Jim Bridger Units 3 and 4 SCR Project



- Two selective catalytic reduction systems, one per unit
- Full notice to proceed issued to engineer, procure and construct contractor on December 2, 2013
- Installation of the Unit 3 electrical power and control commodities are at 61% complete
- Unit 3 commissioning activities will begin in July 2015
- Unit 3 boiler and flue gas path reinforcement contractor mobilized in June 2015
- Unit 4 structural steel erection approximately 65% complete
- Approximately 185 construction personnel on site

MATS

Mercury and Air Toxics Standards (MATS)

- Compliance deadline was April 16, 2015
- The U.S. Supreme Court has heard a challenge to the MATS rule in *Michigan v. EPA* where petitioners argued that EPA unreasonably refused to consider costs in determining whether it is appropriate to regulate hazardous pollutants emitted by electric utilities
 - A decision is expected June 2015
 - No stay is in place; compliance deadline remains in force notwithstanding court challenge

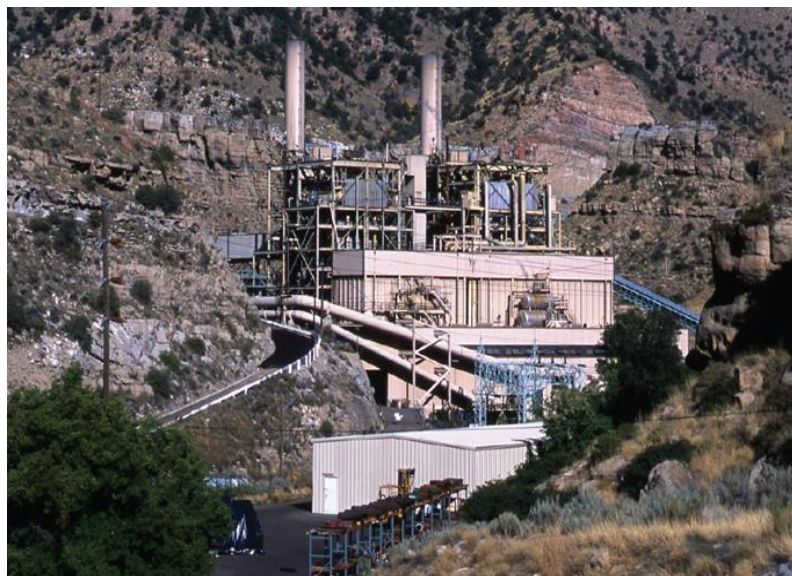
Mercury Emissions Control



- Activated carbon injection systems installed at Dave Johnston, Jim Bridger and Wyodak plants
- Calcium halide coal conditioning and soluble mercury re-emissions control systems installed on certain units at Dave Johnston, Jim Bridger, Naughton and Wyodak plants
- **All systems are in service**

Carbon Plant Status

- Compliance with MATS rules **resulted** in suspending operation of the Carbon units on **April 15, 2015**
- Operation was suspended pending the U.S. Supreme Court decision (expected in June 2015)
- Depreciation schedules and accounting treatment for plant demolition costs have been established in California, Idaho, Oregon, Utah and Wyoming
- Received required regulatory approval in Wyoming to discontinue operation and decommission the plant
- Contract for the decommissioning, demolition and reclamation of the plant **is being negotiated**



Ash / Scrubber Waste

Environmental Regulations—Ash / Scrubber Waste

- Final coal combustion residuals (CCR) rule published in the Federal Register on April 17, 2015, and becomes effective on October 14, 2015
- The regulation is not enforceable by EPA; may only be enforced through RCRA's citizen suit authority
- Establishes certain technical criteria and timeframes for state agencies to administer compliance requirements for individual CCR installations
- CCR surface impoundments (ponds) and landfills may need to close unless they can meet more stringent regulatory requirements
- Fleet wide proxy Subtitle D CCR compliance projects have been incorporated into PacifiCorp's system planning for several years; as final compliance requirements are assessed, compliance project assumptions are being updated
- As defined by the final rule, and after further review of facilities, PacifiCorp operates 16 surface impoundments and five landfills. The rule impacts five PacifiCorp plants: Naughton, Jim Bridger, Dave Johnston, Hunter, and Huntington.
 - PacifiCorp plans to close seven ponds and one landfill by October 14, 2015
 - PacifiCorp also plans to close four additional impoundments within three years of the effective date of the rule