

January 3, 2018

VIA ELECTRONIC MAIL

Public Utility Commission of Oregon 201 High St. SE, Suite 100 Salem, Oregon 97301-3398

Attention: Filing Center

Re: LC 62 – PacifiCorp's Written Report on DSM IRP Acquisition Goals, Environmental Compliance and Transmission Investments, and 111(d) Rule Compliance – 2017 Second Update

PacifiCorp d/b/a Pacific Power provides the attached report in compliance with the following provision included in Order No. 14-252, as modified in Order No. 14-288, streamlined in Order No. 16-071 and clarified by the Commission at the December 20, 2016 Public Meeting:

"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." 1

"We highlight the reporting requirement that the company continue to provide twice yearly updates on the status of DSM IRP acquisition goals at regular public meetings. Include in these updates information on future plant and transmission investment decisions, as a streamlined continuation of Order No. 14-288."²

"If there's not a lot of change from quarter to quarter you can submit a report rather than come in."³

As there are no significant updates since the last provided update dated October 2017, PacifiCorp is providing the attached written report. The report consists of two updated PowerPoint slide decks: the Semi-Annual DSM Update and the Environmental Compliance and Transmission Investment Update.

The Semi-Annual DSM Update slide deck provides an update on the 2017 targeted energy savings forecast by state. The Environmental Compliance and Transmission Investment Update

¹ LC 57, Order No. 14-288.

² LC 62, Order No. 16-071.

³ Public Utility Commission of Oregon, December 20, 2016 Public Meeting, Archived Video at 1:44:26.

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slide deck builds upon information provided in PacifiCorp's last update, with updates for the following information:

- An update on the Energy Imbalance Market (EIM) benefits report from the California Independent System Operator (CAISO), EIM expansion, and Energy Gateway program status on pages 4-8 and page 10.
- An update on the Clean Power Plan (updates in red font) on page 12.
- An update on State Greenhouse Gas items (updates in red font) on page 14.

Please direct any questions regarding this report to me at (503) 813-6583.

Sincerely,

Natasha Siores

Manager, Regulatory Affairs

Enclosures

CERTIFICATE OF SERVICE

I certify that I electronically filed a true and correct copy of PacifiCorp's Written Report on DSM IRP Acquisition Goals, Environmental Compliance and Transmission Investments, and 111(d) Rule Compliance – 2017 Second Update on the parties listed below via electronic mail in compliance with OAR 860-001-0180.

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Dated this 3rd of January, 2018.

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Oregon Public Utility Commission Semi-annual DSM Update December 2017













Let's turn the answers on.

Class 2 DSM Resource Forecast

State Energy Savings Forecast (aMW)				
State	2017			
	Year-End Forecast % of			
	Forecast	Target	Target	
CA	0.55	0.98	56%	
ID	1.74	2.01	87%	
OR	25.67	17.60	146%	
UT	36.24	38.06	95%	
WA	4.50	5.09	88%	
WY	4.58	6.57	70%	
Total	73.27	70.31	104%	

Targets are based on PacifiCorp's 2015 IRP. Targets have since been updated through PacifiCorp's 2017 IRP and state-specific target-setting processes.

Additional Information

For additional information, see "Reports & Program Evaluations by Jurisdictions" on PacifiCorp website

http://www.pacificorp.com/es/dsm.html

 Select your state of choice, year of interest, and type of report type

PacifiCorp Bi-annual Environmental Compliance and Transmission Investment Update December 2017 Update











Let's turn the answers on.

Energy Imbalance Market ("EIM"), Regional ISO, and Transmission Project Development

Transmission Updates

- EIM Update
- Regional ISO
- Transmission Project Development
 - Energy Gateway Projects
 - Boardman to Hemingway



EIM – Calculated Benefits

ВАА	Nov-Dec 2014	Total 2014	
ISO	\$1.24 M	\$1.24 M	
PacifiCorp	\$4.73 M	\$4.73 M	
Total	\$5.97 M	\$5.97 M	

BAA	Jan-Mar 2015	Apr-Jun 2015	Jul-Sep 2015	Oct-Dec 2015	Total 2015
ISO	\$1.45 M	\$2.46 M	\$3.48 M	\$5.28 M	\$12.67 M
PacifiCorp	\$3.81 M	\$7.72 M	\$8.52 M	\$6.17 M	\$26.22 M
NV Energy				\$0.84 M	\$0.84 M
Total	\$5.26 M	\$10.18 M	\$12.00 M	\$12.29 M	\$39.73 M



EIM - Calculated Benefits

2016

BAA	Jan-Mar 2016	Apr-Jun 2016	Jul-Sep 2016	Oct-Dec 2016	Total 2016
ISO	\$6.35 M	\$7.88 M	\$5.44 M	\$8.67 M	\$28.34 M
PacifiCorp	\$10.85 M	\$10.51 M	\$15.12 M	\$8.99 M	\$45.47 M
NV Energy	\$1.70 M	\$5.20 M	\$5.60 M	\$3.07 M	\$15.57 M
Arizona Public Service				\$5.98 M	\$5.98 M
Puget Sound Energy				\$1.56 M	\$1.56 M
Total	\$18.90 M	\$23.59 M	\$26.16 M	\$28.27 M	\$96.92 M



EIM – Calculated Benefits

2017

ВАА	Jan-Mar 2017	Apr-Jun 2017	Jul-Sep 2017	Total 2017
ISO	\$9.50 M	\$15.31 M	\$7.63 M	\$32.44 M
PacifiCorp	\$11.47 M	\$8.80 M	\$10.31 M	\$30.58 M
NV Energy	\$3.50 M	\$5.70 M	\$8.55 M	\$17.75 M
Arizona Public Service	\$5.23 M	\$8.25 M	\$11.08 M	\$24.56 M
Puget Sound Energy	\$1.40 M	\$2.65 M	\$2.98 M	\$7.03 M
Total	\$31.10 M	\$40.71 M	\$40.55 M	\$112.36 M

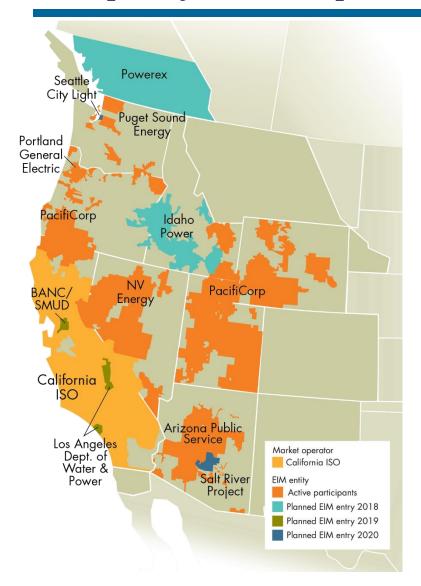


Total EIM Benefits November 2014 - September 2017

BAA	Total
ISO	\$74.69 M
PacifiCorp	\$107.00 M
NV Energy	\$34.16 M
Arizona Public Service	\$30.54 M
Puget Sound Energy	\$ 8.59 M
Total	\$254.98 M



Prospects for EIM Expansion



- PacifiCorp is supportive of broader market participation & coordination; CAISO approach/EIM design is highly scalable for added participation
- NV Energy EIM implementation occurred December 1, 2015, Puget Sound Energy and Arizona Public Service EIM implementation occurred October 1, 2016, and Portland General Electric EIM implementation occurred October 1, 2017
- Idaho Power Company and Powerex Corp are scheduled to join the EIM starting April 2018
- Balancing Authority of Northern California with the Sacramento Municipal Utilities District, and the Los Angeles Department of Water and Power are scheduled to join the EIM starting April 2019
- Salt River Project and Seattle City Light are scheduled to join the EIM starting April 2020
- Mexico Grid Operator CENACE is exploring future entry.



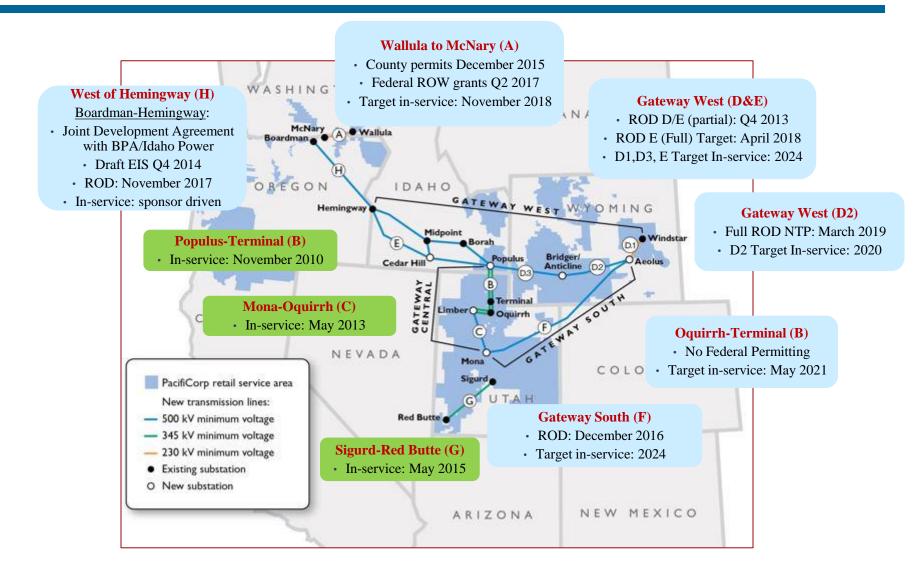
Status of Regional ISO

PacifiCorp supports taking additional time to resolve important governance issues

- Due to regional ISO governance issues, California Governor Brown postponed plans to submit a proposal for the Legislature to consider in the 2016 Legislative Session
- California Assembly bills 726 and 813 were amended mid-2017 addressing the next steps the ISO should take on a governance structure that allows for expansion into a Regional ISO
- In September 2017, California Assembly member Holden announced the Assembly bills would not move forward this year "still more to discuss including the role of the Legislature in review of any proposed governance structure of a new ISO"



Energy Gateway Program Status





Clean Power Plan



Clean Power Plan

- The final Carbon Pollution Emissions Guidelines for Existing Stationary Sources ("Clean Power Plan") was published in the *Federal Register* on October 23, 2015
- On February 9, 2016, the U.S. Supreme Court issued a stay of the Clean Power Plan until current legal challenges are resolved either at the Circuit Court of Appeals for the District of Columbia or at the U.S. Supreme Court
- The Circuit Court of Appeals for the District of Columbia heard oral arguments on the appeal on September 27, 2016
- In August 2017, the U.S. Court of Appeals for the District of Columbia agreed to hold the Clean Power Plan litigation in abeyance
- On March 28, 2017, President Donald Trump issued an Executive Order on Energy Independence calling for review of the Clean Power Plan
- On October 10, 2017, the U.S. Environmental Protection Agency issued a proposal to repeal the Clean Power Plan; comments on the proposed action are due January 16, 2017
- On December 18, 2017, the U.S. Environmental Protection Agency released a pre-publication version of an Advance Notice of Proposed Rulemaking ("ANPR") for replacing the Clean Power Plan. Comments on the ANPR are due 60 days after its publication in the *Federal Register*



State Greenhouse Gas Emissions Policy Update



State Greenhouse Gas Update

Oregon

- In early 2017, the Department of Environmental Quality finalized a study commissioned by the legislature on the potential adoption of a cap-and-trade program in Oregon
- At end of the 2017 session, the Clean Energy Jobs bill, Senate Bill 1070, was introduced and would address state and regional cap-and-trade policies and programs
- In September 2017, the Senate and House environment committees established four work groups to review and make recommendations on specific components of a cap-and-trade program in Oregon
- A revised bill is expected to be released January 8, 2017

Washington

- During the 2017 legislative session, a number of carbon tax proposals were introduced; however, none of them were successfully passed
- It is anticipated that a coalition of environmental advocates, led by The Nature Conservancy, will introduce a carbon policy ballot measure in 2018; details on what this will look like are uncertain

California

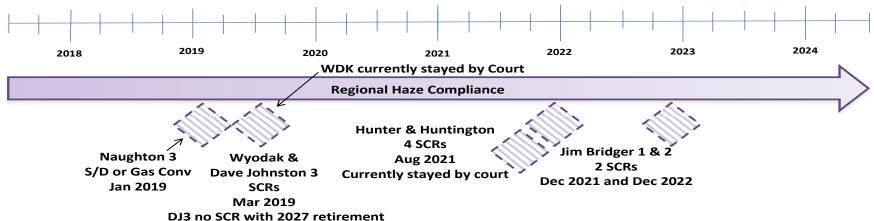
- In 2017, the California Air Resources Board finalized regulatory amendments for post-2020 cap-and-trade program including allowance allocation to electric utilities
- During the 2017 session, the California legislature passed Assembly Bill 398 with a two-thirds super majority vote; AB 398 extends the California cap-and-trade program to December 31, 2030
- Two-thirds super majority vote moots ongoing legal uncertainty regarding whether the cap-and-trade program constituted a tax
- During the 2017 session, a 100% renewable portfolio standard bill was introduced; it did not pass in the 2017 session but is expected to surface again during the 2018 session



Regional Haze Update



Regional Haze Compliance Requirements - Operated Plants



Utah

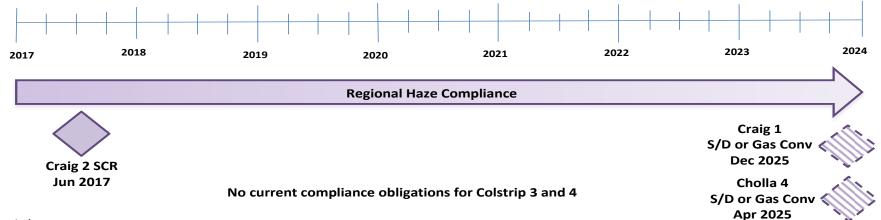
- The EPA published its final action on the Utah Regional Haze SIP in the *Federal Register* on June 30, 2016, requiring installation of SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2 by August 5, 2021 under a FIP
- PacifiCorp and other parties filed requests for administrative reconsideration and stay, as well as judicial review and stay, of EPA's Utah FIP in late 2016
- On July 14, 2017, EPA sent letters to PacifiCorp and the state of Utah indicating its intent to reconsider its final FIP action
- On September 11, 2017, the 10th Circuit Court of Appeals granted a stay and abatement of litigation of the EPA Utah FIP to facilitate EPA's reconsideration

Wyoming

- Effective March 3, 2014, the EPA approved the Wyoming Regional Haze SIP requirements for Jim Bridger Units 1 and 2 SCR installations in 2021 and 2022
- At the same time, EPA issued a FIP for the Wyodak plant, requiring the installation of SCR within five years (i.e., by 2019)
- The 10th Circuit Court of Appeal's decision on the appeals of EPA's final FIP actions is not expected to occur until 2018, at the earliest



Regional Haze Compliance Requirements – Partner-Operated Plants



<u>Arizona</u>

- EPA published its approval of the re-assessed Arizona SIP in the *Federal Register* on March 27, 2017, allowing Cholla Unit 4 to remain coal-fueled through April 2025 and avoid the installation of SCR, with the commitment to cease coal-fueled operation at that time
- · All litigation regarding the EPA's Arizona FIP final action affecting Cholla Unit 4 has been dismissed

<u>Colorado</u>

- The state of Colorado, EPA, and other parties to the Craig Unit 1 Regional Haze settlement negotiated an alternative compliance plan, allowing the unit to remain coal-fueled through 2025 and avoid the installation of SCR, with the commitment to cease coal-fueled operation at that time The state of Colorado Air Quality Board approved the agreement on December 15, 2016.
- The Colorado Department of Public Health and Environment submitted the associated Colorado SIP amendment for EPA's review and approval on May 27, 2017. EPA's review and approval process is expected to carry into 2018

Montana

• There are no pending Regional Haze compliance obligations for Colstrip Units 3 and 4



National Ambient Air Quality Standards



National Ambient Air Quality Standards

One-hour NO₂ Standard

- All areas of the country designated as unclassifiable
- EPA to re-designate attainment areas based on expanded ambient monitoring network by 2017

One-hour SO₂ Standard

- Initial EPA designations in July 2013
- Many areas of the country designated as unclassifiable and will be re-designated based upon a combination of ambient monitoring and facility modeling
- Re-designations to be completed in 2017 through 2020, depending upon approach taken

Fine Particulate (PM_{2.5}) Standard

- EPA notification in May 2010 to states that failed to submit compliance SIPs (including UT and WY)
- States have until 2020 to be in attainment

Ozone Standard

- EPA finalized new ozone standard in October 2015
- The deadline for EPA to promulgate initial designations for the 2015 ozone NAAQS was October 1, 2017. EPA has yet to make those designations



Coal Combustion Residuals



Coal Combustion Residuals

- As of October 19, 2015, PacifiCorp had nine surface impoundments and four landfills that are subject to the CCR rule
- PacifiCorp is currently in the process of closing four of the nine impoundments
- Litigation of the CCR rule is ongoing, but the rule remains in effect. PacifiCorp continues to comply with the requirements of the rule



Clean Water Act



Clean Water Act

Effluent Limit Guidelines (ELG)

- EPA published the final ELG for steam generating units in the *Federal Register* on November 3, 2015.
- The rule impacts PacifiCorp's Dave Johnston, Naughton, and Wyodak facilities.

316(b)

- EPA published the final 316(b) rule on May 19, 2014, for cooling water intake structures at existing facilities
- The rule allows seven compliance options to address impingement and to assess best technology options for entrainment
- The impact on PacifiCorp facilities is not expected to be significant as most have cooling towers
- The rule is currently stayed. Accordingly, projects anticipated to occur at the Dave Johnston and Wyodak plants are on hold

