

September 29, 2021

VIA ELECTRONIC MAIL

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

Re: LC 62 and LC 67 – PacifiCorp’s Written Report on DSM IRP Acquisition Goals, Environmental Compliance and Transmission Investments – 2021 First 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 Public Utility Commission of Oregon (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

PacifiCorp is providing the attached written report for the period of January 1, 2021 through June 30, 2021. PacifiCorp can also provide a presentation of its update if the Commission has any questions or concerns with the information provided.

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 2021 targeted energy savings forecast by state. The

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.

Public Utility Commission of Oregon

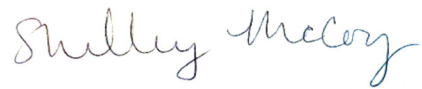
September 29, 2021

Page 2

Environmental Compliance and Transmission Investment Update slide deck includes updates throughout, building upon information provided in PacifiCorp's last update.

Please direct any questions regarding this report to Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934.

Sincerely,

A handwritten signature in blue ink that reads "Shelley McCoy". The signature is written in a cursive style.

Shelley McCoy
Director, Regulation

Enclosures



PacifiCorp Semi-Annual Demand Side Management Update

First Update for 2021



Class 2 Energy Resource Acquisitions

State Wide Energy Savings Results (aMW)			
State	1/1/2021 - 6/30/2021		
	Actuals	Target	% of Target Achieved
CA	0.30	0.60	50%
ID	0.62	2.01	31%
OR	7.31	18.90	39%
UT	12.52	29.01	43%
WA	1.30	4.63	28%
WY	1.60	6.27	25%
Total	23.66	61.42	39%

Note: The reported savings in the table above are preliminary for January – June 2021. The estimated savings results are at generation and are gross. The source of the 2021 targets is the 2019 IRP portfolio energy efficiency selections in Table D.4, converted from MWh to aMW.



Additional Information

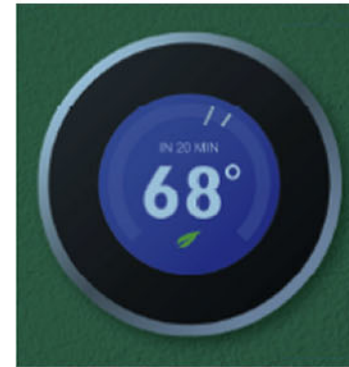
Additional information on Class 2 energy resource acquisitions can be found on PacifiCorp's website under the "Reports and Program Evaluations by State" section at:

<https://www.pacificorp.com/environment/demand-side-management.html>



PacifiCorp Semi-Annual Environmental Compliance and Transmission Investment Update

First Update for 2021



Transmission Updates



- EIM Update
- Transmission Project Development

EIM – Calculated Benefits

2021



BAA	Jan-Mar 2021	Apr-Jun 2021	Jul-Sep 2021	Oct-Dec 2021	Total 2021
ISO	\$8.91 M	\$27.58 M			\$36.49 M
PacifiCorp	\$20.48 M	\$15.05 M			\$35.53 M
NV Energy	\$14.14 M	\$6.20 M			\$20.34 M
Arizona Public Service	\$15.01 M	\$9.25 M			\$24.26 M
Puget Sound Energy	\$4.31 M	\$4.16 M			\$8.47 M
Portland General Electric	\$8.80 M	\$7.45 M			\$16.25 M
Idaho Power	\$12.54 M	\$15.23 M			\$27.77 M
Powerex	\$1.17 M	\$1.01 M			\$2.18 M
BANC/SMUD	\$7.53 M	\$18.12 M			\$25.65 M
Seattle City Light	\$2.60 M	\$2.75 M			\$5.35 M
Salt River Project	\$5.52 M	\$12.61 M			\$18.13 M
Turlock Irrigation District		\$1.37 M			\$1.37 M
Los Angeles Department of Water and Power		\$8.54 M			\$8.54 M
Public Service Company of New Mexico		\$2.32 M			\$2.32 M
Northwestern Energy		\$1.06 M			\$1.06 M
Total	\$101.01 M	\$132.70 M			\$233.71 M

Total EIM Benefits

November 2014 – June 2021



BAA	Total
ISO	\$290.41 M
PacifiCorp	\$311.45 M
NV Energy	\$133.99 M
Arizona Public Service	\$213.54 M
Puget Sound Energy	\$63.40 M
Portland General	\$121.28 M
Idaho Power	\$109.18 M
Powerex	\$25.99 M
BANC/SMUD	\$71.87 M
Seattle City Light	\$11.99 M
Salt River Project	\$54.19 M
Turlock Irrigation District	\$1.37 M
Los Angeles Department of Water and Power	\$8.54 M
Public Service Company of New Mexico	\$2.32 M
Northwestern Energy	\$1.06 M
Total	\$1.42 B

Prospects for EIM Expansion



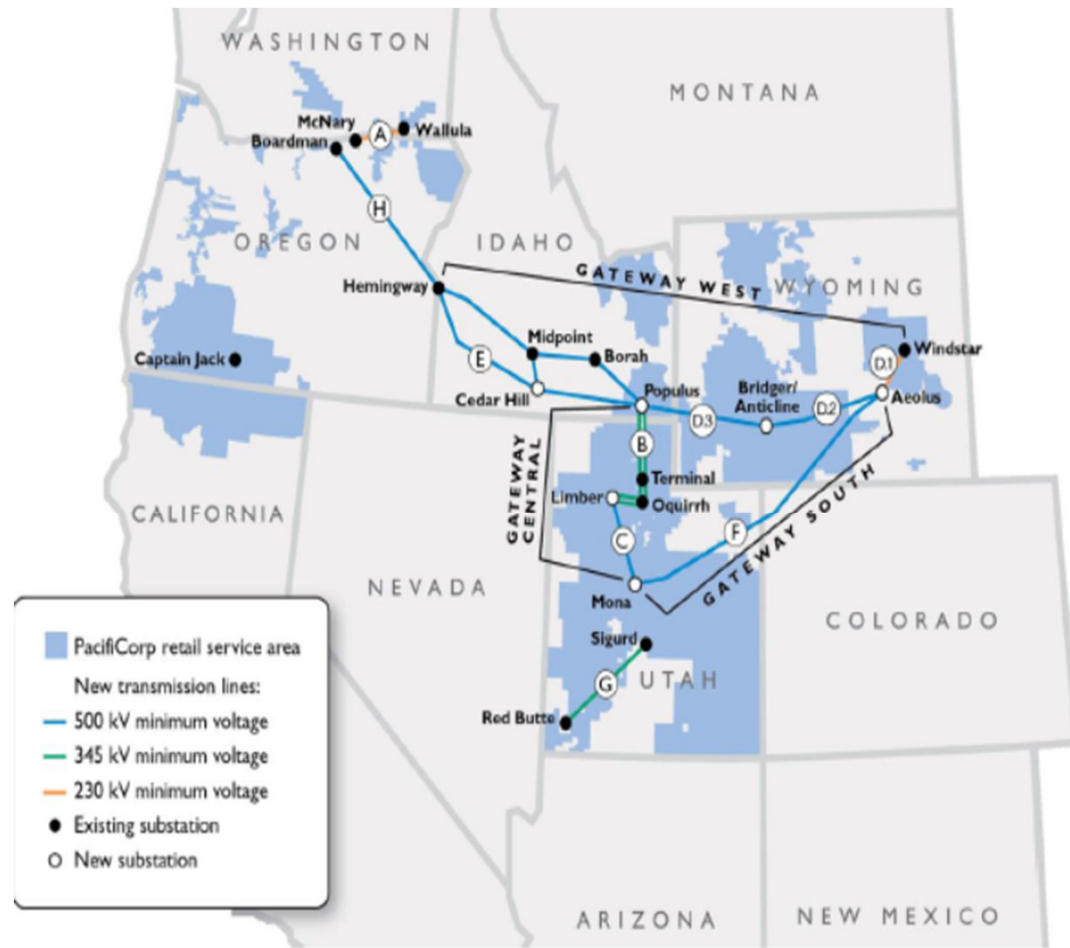
- PacifiCorp is supportive of broader market participation & coordination; CAISO approach/EIM design is highly scalable for added participation.
- NV Energy EIM implementation occurred December 2015, Puget Sound Energy and Arizona Public Service EIM implementation occurred October 2016, Portland General Electric EIM implementation occurred October 2017, Idaho Power Company and Powerex Corp EIM implementation occurred April 2018, Balancing Authority of Northern California, with the Sacramento Municipal Utilities District EIM implementation occurred April 2019, and Salt River Project and Seattle City Light EIM implementation occurred April 2020. Public Service Company of New Mexico, the Los Angeles Department of Water and Power, Turlock Irrigation District, and Balancing Authority of Northern California Phase 2 joined the EIM April 2021 and Northwestern Energy joined June 2021.
- Avista, Tacoma Power, Tucson Electric Power and Bonneville Power Administration are scheduled to join the EIM in spring 2022. El Paso Electric and Avangrid commit to join the EIM in spring 2023.

Energy Gateway Program Status



Over \$6 billion total investment planned; \$2.4 billion placed in-service

- Gateway West
 - BLM record of decision on 8 of 10 segments November 2013
 - BLM record of decision on last 2 segments April 2018
 - Planned in-service 2026-2030
- Gateway South
 - BLM record of decision December 2016
 - Planned in-service 2024
- Boardman-to-Hemingway
 - BLM record of decision December 2017
 - Oregon Energy Facility Siting Council site certificate target date June 2022
 - Planned in-service 2026
- **Segments In-Service**
 - Populus-to-Terminal November 2010
 - Mona-to-Oquirrh May 2013
 - Sigurd-to-Red Butte May 2015
 - Wallula to McNary January 2019
 - Aeolus-to-Jim Bridger/Anticline November 2020



This map is for general reference only and reflects current plans. It may not reflect the final routes, construction sequence or exact line configuration.



Clean Power Plan

Clean Power Plan (CPP)



- March 2017, President Trump issued an Executive Order directing the EPA to review the CPP.
- April 2017, the Circuit Court of Appeals abates the lawsuits on the CPP for 60 days; lawsuit continues to be on hold.
- October 2017, EPA proposed to repeal the CPP and issued an Advanced Notice of Proposed Rulemaking to solicit information on the best system for emission reduction; EPA also requested the court case remain in abeyance until completion of rulemaking.
- PacifiCorp submitted comments on the ANPR on February 26, 2018 and the proposed CPP Repeal on April 28, 2018.
- August 2018, EPA proposed Affordable Clean Energy (ACE) Rule to replace CPP
- June 2019, EPA finalized the ACE Rule and repealed the CPP.



Affordable Clean Energy (ACE) Rule

ACE Rule



- Proposed ACE Rule published in the Federal Register on August 31, 2018.
- October 2018, PacifiCorp submitted comments on the ACE Rule in conjunction with Berkshire Hathaway Energy and its individual businesses.
- Final ACE Rule published in the Federal Register on July 8, 2019.
- ACE Rule changed the definition of “Best System of Emission Reduction” or “BSER” for CO2 emissions.
 - BSER limited to specific Heat Rate Improvement (“HRI”) projects for coal-fired electric generating units, identified as “candidate technologies.”
- On January 19, 2021, the D.C. Circuit vacated and remanded the Affordable Clean Energy rule to the EPA.
 - It was determined that the rule "rested critically on a mistaken reading of the Clean Air Act" that limited the best system of emission reduction to actions taken at a facility.



Paris Agreement

Paris Agreement



- In December 2015, 197 nations and entities negotiated the Paris Agreement, a coordinated action on climate change under the United Nations Framework Convention on Climate Change.
 - The Paris Agreement became effective November 4, 2016.
 - 191 of those parties are currently signatories to the Paris Agreement.
- The Paris Agreement reaffirmed the goal of limiting global temperature increases to less than 2 degrees Celsius and established the following commitments by all parties:
 - Establish and report “nationally determined contributions” (NDCs) to reduce emissions and adapt to climate change.
 - Take stock of progress toward long-term goals based on five-year reporting cycle.
 - Establish NDCs based on progress toward long-term goals, allowing NDCs to reflect the appropriate level of ambition.
- The Paris Agreement obligates the United States to reduce greenhouse gas emissions by 26-28% from 2005 levels by 2025.

Paris Agreement



- Under the Trump administration, the United States announced its withdrawal from the Paris Agreement, a process which was completed on November 4, 2020.
- Under the Biden administration, the United States reaccepted the terms of the Paris Agreement and re-entered the agreement on February 19, 2021.
- At a climate leaders summit April 22-23, 2021, the United States announced new goals to reduce greenhouse gas emissions by 50 to 52% economy-wide by 2030 compared to 2005 levels, and to reach 100% carbon pollution-free electricity by 2035.
 - Additional details on how the United States will implement these goals are anticipated to be released through fall 2021.
 - Implementation of requirements arising under the Paris Agreement has the potential to impact PacifiCorp's operations and investment decisions



Regional Haze

Utah Regional Haze Compliance



- July 2016, EPA published its final action on UT Regional Haze SIP. requiring SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2 within five years.
- September 2016, PacifiCorp and other parties filed a request for reconsideration and an administrative stay with EPA.
- July 2017, EPA sent letters to PacifiCorp and the state of Utah indicating its intent to reconsider its FIP; the agency also filed a motion with the 10th Circuit Court of Appeals to hold the litigation in abeyance pending the rule's reconsideration.
- September 2017, the 10th Circuit granted the petition for stay and the request for abatement; the compliance deadline of the FIP and the litigation was stayed indefinitely pending EPA's reconsideration.

Utah Regional Haze Compliance



- January 2020, EPA published proposed approval of an alternative SIP submitted by Utah, which shows improved visibility through modeling, makes the shutdown of the Carbon plant federally enforceable and adopts the NOx controls and emission limits on the Hunter and Huntington plants, including on an additional non-BART unit at Hunter. The proposal withdraws the federal implementation plan requirements to install SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2.
- February 2020, EPA held a public hearing on the proposed SIP approval in Price, Utah.
- EPA published the final Utah SIP rule on November 27, 2020, which aligned with the proposed rule, and on January 11, 2021, the Tenth Circuit Court of Appeals dismissed challenges to EPA's 2014 FIP in light of the finalized Utah SIP replacement.
- January 20, 2021, HEAL Utah and other environmental groups filed a petition for review in the federal Tenth Circuit Court of Appeals of the Utah regional haze state implementation plan. PacifiCorp and the state of Utah filed motions to intervene.
- August 19, 2021, at a court mediation conference EPA requested participants to consider settlement of the HEAL petition. HEAL Utah agreed to provide a settlement proposal for the next mediation conference scheduled for September 13, 2021.

Utah Regional Haze Compliance



- Second Planning Period.
 - On April 21, 2020, PacifiCorp submitted to the Utah Department of Environmental Quality a Reasonable Progress Analysis for the regional haze second planning period for the Huntington and Hunter plants.
 - The Utah Division of Air Quality provided comments to PacifiCorp June 16, 2021, regarding the Reasonable Progress Analyses submitted for the Hunter and Huntington plants. PacifiCorp provided a written response to the comments on August 31, 2021.
 - PacifiCorp continues to exchange information with the Utah Department of Environmental Quality regarding the Reasonable Progress Analysis and second planning period requirements. The state anticipates submitting the second planning period SIP to the EPA by the end of September 2021.

Wyoming Regional Haze Compliance

- January 2014, EPA issued a regional haze FIP partially approving certain parts of the state of Wyoming's SIP.
- EPA approved the following SIP requirements:
 - Jim Bridger Units 3&4 Installed SCR in 2015, 2016
 - Jim Bridger Units 1&2 Install SCR by 2021 and 2022
 - Naughton Unit 3: Remove from coal-fueled service in January 2019, with option to convert to gas
 - Naughton Units 1&2: Install LNB and OFA (.26 lb/MMBtu Nox rate)
 - Dave Johnston Unit 4: install LNB and OFA (.15 /b/MMBtu Nox rate)
 - Dave Johnston Unit 1&2: no new controls
 - Dave Johnston Unit 3: EPA offered two alternative compliance paths in the FIP: (1) install LNBS and OFA and shut-down by 2027 or (2) install LNB/OFA and SCR.
 - Wyodak Unit 1: Install SCR within five years of the final rule (challenged by PacifiCorp)
- April 2017, after appeals, EPA and Basin Electric negotiated settlement agreement and filed a joint motion in the 10th Circuit to hold the Basin-specific issues in abeyance.

Wyoming Regional Haze Compliance

- PacifiCorp, Wyoming and Basin Electric submitted motions requesting the court hold all of the consolidated appeals of challenged portions of the Wyoming Regional Haze FIP in abeyance while the Basin Electric settlement is processed and promulgated by EPA.
- The 10th Circuit Court of Appeals granted the motion to hold entire case in abeyance pending Basin's settlement; the Basin settlement required notice and comment rulemaking and was finalized in 2017.
- The court denied environmental groups motion asking the court to bifurcate certain claims and to reconsider its decision to abate the case pending settlement and continued the stay while parties worked with the court mediator.
- October 2019, as part of mediation, PacifiCorp submitted a Request for Reconsideration of the EPA's FIP to install SCR on Wyodak.
- February 2020, the court granted an additional 90-day abatement while EPA, PacifiCorp and the state of Wyoming continue to explore potential settlement of the dispute.
- EPA, the state of Wyoming and PacifiCorp signed the Wyodak Settlement Agreement December 16, 2020, and the rule was published in the Federal Register and subject to public comment. PacifiCorp was notified by the EPA July 13, 2021, that the agency will not finalize the Wyodak Settlement Agreement.
- PacifiCorp, the State of Wyoming and EPA continue discussions regarding Wyoming regional haze compliance options through court mediation.

Wyoming Regional Haze Compliance

- February 2019, PacifiCorp submitted a “Reasonable Progress Reassessment” for the Jim Bridger plant to the Wyoming Division of Air Quality (WDAQ). The Reasonable Progress Reassessment is an innovative proposal that, if approved, would implement new plant-wide emission limits at Jim Bridger, in lieu of the requirement to install SCR equipment on Jim Bridger Units 1 and 2 (currently required by the end of 2022 and 2021, respectively).
- April 2019, PacifiCorp met with Wyoming and EPA in Washington D.C. to discuss the Bridger Reasonable Progress Reassessment. EPA raised nine issues relating to the Reassessment for further consideration, and PacifiCorp worked with WDAQ to address the nine issues.
- July 2019, the Bridger Reasonable Progress Reassessment was published for public comment.

Wyoming Regional Haze Compliance

- WDAQ issued the Jim Bridger Regional Haze Reassessment air permit May 5, 2020.
- WDAQ submitted a Regional Haze State Implementation Plan revision approving the Reassessment to the U.S. Environmental Protection Agency May 14, 2020.
- EPA Region 8 informed PacifiCorp that it had approved the SIP revision in November of 2020. However, the proposed approval was never published in the Federal Register or approved by EPA.
- PacifiCorp was contacted by the EPA June 11, 2021, and notified that the agency did not intend to approve Wyoming's proposed State Implementation Plan revision with the Jim Bridger Regional Haze Reassessment.
- PacifiCorp, the State of Wyoming and EPA continue discussion and negotiation regarding first planning period requirements and options to address the current SIP requirements for Jim Bridger Units 1 and 2, which conflict with the Wyoming SIP currently waiting for EPA's review. Unless an extension is granted to the current federally enforceable SIP, Unit 2 will be forced to cease operation December 31, 2021, due to the SCR-level emission requirements.
- Second Planning Period
 - On March 31, 2020, PacifiCorp submitted a four-factor reasonable progress analysis for the regional haze second planning period to WDAQ which analyzed PacifiCorp's Naughton, Jim Bridger, Dave Johnston, and Wyodak plants.
 - WDAQ anticipates submitting the second planning period SIP to EPA around September 2021.

Non-Operated Plants Regional Haze Compliance



Colorado

- Tri-State's environmental compliance staff and counsel negotiated an agreement in principle with EPA, CDPHE, WildEarth Guardians, and the National Parks Conservation Association on an alternate Regional Haze compliance strategy incorporating accelerated retirement for Unit 1. The agreement will result in a year-end 2025 shutdown with certain interim NO_x emission reduction commitments from the partner owners.
- The state of Colorado's Air Quality Board approved the agreement during a hearing held on December 15, 2016.
- CDPHE submitted SIP amendment documentation to EPA Region VIII on May 27, 2017.
- EPA approved Colorado's regional haze SIP, effective August 6, 2018. Revisions to the SIP include source-specific revisions to the NO_x best available retrofit technology (BART) determination for Craig Unit 1.



National Ambient Air Quality Standards

National Ambient Air Quality Standards

One-hour NO₂ & SO₂ Standards

- NO₂: All areas of the country designated as unclassifiable/attainment.
- SO₂: In January 2018 EPA published the Air Quality Designations for the 2010 SO₂ NAAQS Round 3.
- Counties of Emery, Campbell, Lincoln and eastern Sweetwater were classified as attainment/unclassifiable.
- In April 2021 EPA classified Converse County as attainment/unclassifiable.

Fine Particulate (PM_{2.5}) Standard

- In May 2017 EPA reclassified Salt Lake City and Provo to Serious Nonattainment.
- In November 2020 EPA proposed to designate Salt Lake City and Provo as being in attainment with the PM_{2.5} Standard. The public comment period was extended to May 2021.
- In October 2019 EPA approved a clean data determination for Salt Lake based on Utah's submission of monitoring data showing it had not exceeded the standard for three years. Utah is still required to implement the SIP for sources and the action did not constitute a re-designation to attainment.

National Ambient Air Quality Standards

Ozone Standard

- EPA finalized a lower ozone standard in October 2015.
- In May 2018 the Wasatch Front in Utah was designated as Marginal Compliance for Ozone and has three years to develop a plan to meet the standard.
- In May 2021 the State of Utah submitted a plan to meet the standard to the EPA for approval.



Coal Combustion Residuals

Coal Combustion Residuals



- PacifiCorp operates five impoundments and four landfills that are subject to the CCR rule.
 - Three additional impoundments that have been closed according to the CCR regulations and two currently in the process of being closed.
- Required groundwater monitoring found four impoundments and two landfills have impacted groundwater and require remediation. PacifiCorp is preparing remedies for each site based on regulatory requirements and the public input.
 - Remedies have been selected for the two landfills and two of the impoundments. Additional investigation is necessary before a remedy can be selected for the remaining two impoundments.
- Utah adopted the federal final rule as state law in September 2016, PacifiCorp is in compliance with all requirements.
- August 2017, EPA proposed permitting guidance on how states' CCR programs should comply with the requirements of the final rule.
- July 2019, Wyoming proposed adoption of a state CCR law, which now awaits legislative approval in 2022.
- It is anticipated that Utah and Wyoming will submit applications for approval of their respective CCR programs, but the timing of the submissions remains uncertain.

Coal Combustion Residuals



- EPA published the final CCR Phase I Part A rule on August 28, 2020. The rule requires unlined CCR surface impoundments to cease receipt of waste and initiate closure as soon as technically feasible but no later than April 11, 2021. The rule establishes the requirements for alternative closure deadlines and other reporting and monitoring requirements.
- PacifiCorp submitted an alternative closure demonstration for the Naughton Plant on October 23, 2020. If approved by EPA, the demonstration will allow the South Ash Pond to continue to receive CCR and non-CCR wastestreams past April 11, 2021. To be eligible for the extension, the Naughton plant must cease operation of coal fired boilers and complete closure of the CCR surface impoundment by October 17, 2028. Under the CCR Rule, the April 11, 2021, deadline is tolled until EPA responds to the submission.

Coal Combustion Residuals



- PacifiCorp submitted an alternative closure demonstration for the Jim Bridger Plant to EPA on November 5, 2020. If approved, the demonstration will allow continued receipt of coal combustion residuals and non-coal combustion residual wastestreams past April 11, 2021, until a replacement pond is built in 2023. Under the CCR Rule, the April 11, 2021, deadline is tolled until EPA responds to the submission.



Clean Water Act

Clean Water Act



Effluent Limit Guidelines (ELG)

- EPA published the final ELG for steam electric generating units in the *Federal Register* on November 3, 2015.
- September 2017, EPA postponed compliance dates for FGD and bottom ash transport water to “as soon as possible beginning” November 1, 2020 and announced its intent to conduct new rulemaking.
- October 2020, EPA finalized the ELG Reconsideration Rule, adjusting the “as soon as possible” deadline for compliance with bottom ash transport wastewater requirements to October 13, 2021, and the “no later than” deadline to December 31, 2025.
 - PacifiCorp operates one plant, the Dave Johnston Plant, that discharges bottom ash transport wastewater.
 - The plant will submit a permit modification to comply with the ELGs for bottom ash transport wastewater by the October 13, 2021, deadline.

Clean Water Act



316(b) Cooling Water Intake Structure Rule

- PacifiCorp operates six plants subject to the 316(b) Rule, including Dave Johnston, Gadsby, Hunter, Huntington, Jim Bridger and Naughton.
- EPA published the final 316(b) Rule for steam electric generating units in the *Federal Register* on August 15, 2014.
- The rule requires submittal of Permit Application Requirements (PARs) for all six plants, which were timely submitted.
- May 2019, PacifiCorp submitted an application to renew the Dave Johnston Wyoming Pollutant Discharge Elimination System (WYPDES) wastewater discharge permit. Stakeholders, including PacifiCorp, submitted comments during two public comment periods (December 2019 and August 2020). The draft permit states that PacifiCorp will comply with the 316(b) rule by December 31, 2023. The Wyoming Division of Water Quality has not issued a final permit.

Title V Air Permit



- On July 2, 2020, the Tenth Circuit Court of Appeals vacated the EPA order for the Hunter plant Title V permit and remanded the permit to EPA to consider the merits of Sierra Club's claims that the plant failed to obtain a major source air permit in 1997.
- On January 13, 2021, the EPA denied Sierra Club's petitions but ordered the Utah Division of Air Quality to reopen the 2020 Hunter Title V permit to determine whether certain Clean Air Act major source requirements apply.
- The Division released its determination for public comment on May 12, 2021. Sierra Club submitted comments opposing the determination on June 11, 2021. The Division is expected to respond to the comments and submit its final determination to EPA in the fall of 2021.