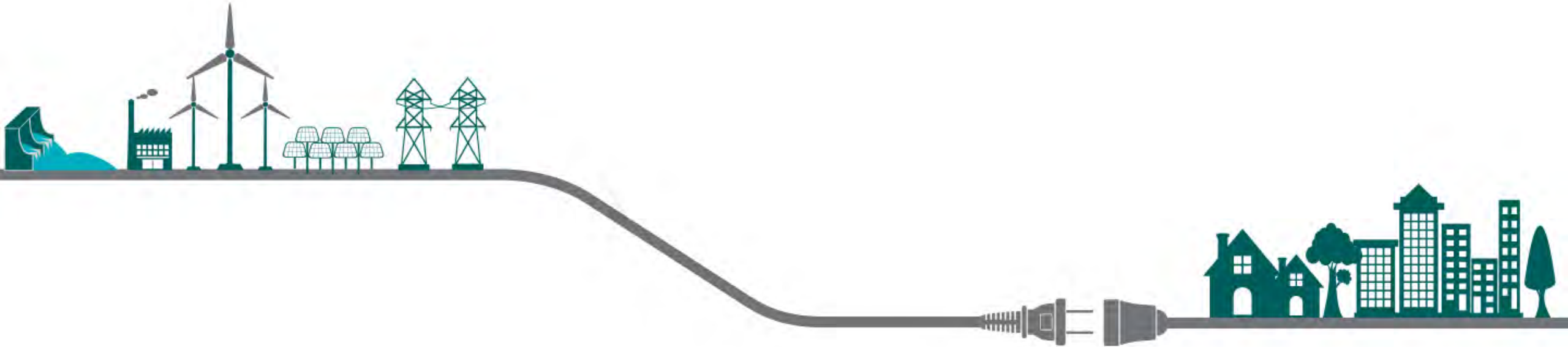


Coal Unit Overview



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April 8, 2021 IRPAC

Presentation Overview



- Current coal unit operations
- Coal exit story
- 2021 IRP coal unit cost inputs, considerations and assumptions

These inputs are critical to support a robust directional comparison of portfolio costs.

Current Operations—Jim Bridger

- Jim Bridger Units 1–4
 - Jointly owned with PacifiCorp (IPC 1/3rd, 706 MW)
 - Joint ownership is not unit specific.
 - Plant output (dispatch) is scheduled independently.
 - Each party is proportionally responsible for ownership share plant minimum output level (when the units are online). Joint decision to take a unit offline.
 - Operating and capital costs are shared proportional to ownership.
 - Coal is supplied from **Bridger Coal Company (co-owned with PacifiCorp)** and the **Black Butte mine**.



Current Operations – North Valmy

- North Valmy Unit 2
 - Jointly owned with NV Energy (IPC 50%, 138 MW)
 - Plant output (dispatch) is scheduled independently.
 - Primarily seasonal (summer operations)
 - Unit operating and capital costs are shared proportional to ownership.
 - Sharing of common plant costs is governed by a 2019 Framework Agreement.
 - Each party is responsible for unit minimum output level proportional to ownership (when both partners are in the unit).
 - Coal supplied via rail from Utah, Colorado, southern Wyoming and southern PRB.



Drivers of Coal Unit Exits for Utilities



- Economics and Market Forces
 - Aging infrastructure, increases in operating costs
 - Drop in marginal operating costs of other dispatchable resources (natural gas)
 - Declining cost of and increased adoption of renewable energy technologies
- Greenhouse gas legislation
- Other environmental legislation and requirements related to acid rain, regional haze, and the Mercury and Air Toxics Standards (MATS) rule.
- Compliance with portfolio standards
- Carbon-reduction commitments

IRP Coal Exit Story/Chronology



- Boardman
 - Settlement with State of Oregon for Regional Haze Compliance
 - Last day of operations was October 15, 2020
- Valmy Unit 1 Exit
 - December 31, 2019
- 2019 Preferred Portfolio and exit timing

Status of Bridger Discussions



- Currently working with PacifiCorp to develop term sheet
 - Outline specific terms regarding responsibilities for unit exits for each partner with different exit dates

Bridger Fuel Forecast



Bridger Coal Company (BCC)

- Joint venture with PacifiCorp
- Two different mining operations
 - Surface mine—end-of-life year for planning purposes—2028
 - Underground mine—scheduled to cease production end of 2021
 - Approximately 69% of the need 2021–2028

Black Butte Coal Company (BB)

- Owned by Lighthouse Resources, LLC
- Delivered via Union Pacific Railroad—approx. 20 miles
- Approximately 31% of the need 2021–2028; 100% in 2029–2030

Valmy Fuel Forecast



- Uinta Basin coal 2020 average spot prices published by the U.S. Energy Information Administration (EIA).
- 2020 published spot prices generally escalated 2.30% annually through 2025.
- Rail transportation cost is based on existing contract prices.

Bridger Unit Exits—Cost Considerations

- Costs likely avoided with an early exit
 - Variable costs: cost for coal, and non-fuel operating costs tied to a unit of production
 - Incremental unit-specific capital investments
- Costs not likely avoided with an early exit
 - Remaining net plant balances
 - Ongoing ownership share of fixed operating costs if co-owner chooses to continue operating
 - Decommissioning and demolition costs
 - Ongoing investments in common plant infrastructure
- Valmy Unit 1 Exit (Framework) Agreement is used as a guide to inform Bridger cost-sharing assumptions in the IRP analysis.

Additional Bridger Considerations



- If a coal unit exits earlier than 2034, these costs will be added to the AURORA portfolio results:
 - Remaining rate base balance of the unit
 - Any remaining decommissioning and demolition costs to cover that unit's responsibility
- Cost inputs are coordinated with PAC (budgets), but coal unit exit timing is analyzed and modeled independently from PAC.

Questions?

