

Rocky Mountain Power Business Update

Public Service Commission of Utah
April 5, 2021



Agenda

Welcome & Introductions

Gary Hoogeveen

- PacifiCorp news/updates
- Legislative Update
- Service Quality

Paul Wood

- Recent market issues

Joe Hoerner

- NWPP Resource adequacy

Joelle Steward

- Regulatory Update

PacifiCorp News and Updates

- Coal Plant Closure Announcements
 - **Craig Station, Colorado**
 - In 2020, joint owners announced decisions to close Unit 1 (428 MW) by the end of 2025 and Unit 2 (428 MW) by the end of 2028
 - PacifiCorp owns 19.3% of both Unit 1 and 2, which are operated by Tri-State
 - **Hayden Station, Colorado**
 - In January 2021, joint owners announced decision to close Unit 1 (179 MW) in 2028 and Unit 2 (265 MW) in 2027
 - PacifiCorp owns 24.5% of Unit 1 and 12.6% of Unit 2, which are operated by Xcel Energy
- PacifiCorp leadership changes to support transmission development
- Berkshire Hathaway Energy/PacifiCorp commitment to a workplace culture that values diversity, equity and inclusion

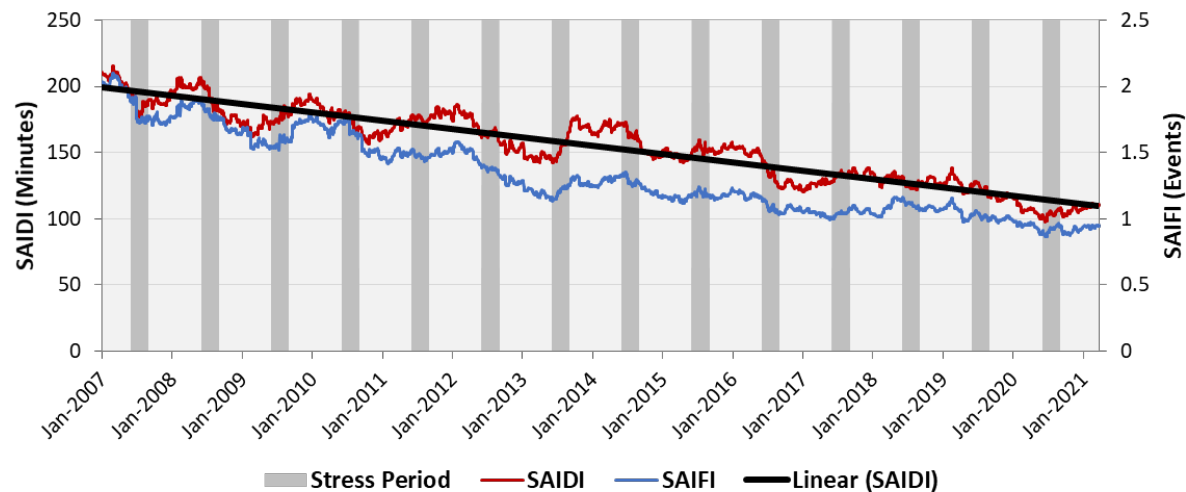
Legislative Update

- Utah – some minor changes signed into law
 - H.B. 32 – Energy Balancing Account interim rates
 - H.B. 141 – Resolves service territory issues during annexation
 - H.B. 388 – Clarifies reliability and resiliency expectations and encourages development of certain types of generation (pumped hydro and hydrogen)
 - Wyoming legislature has been very active in response to potential future coal plant closures
 - **S.F. 136 – Requires WPSC to consider socio-economic factors in ratemaking**
 - H.B. 155 – Electric generation reliability and liability – amendments remove the liability provisions in the bill
 - **H.B. 166 – Creates rebuttal presumption against early coal plant retirements – amendments clarify that only Wyoming plants to be considered and only applies to plants retired before the end of their useful lives.**
 - H.B. 205 – Select committee on extractive industry transitions
 - **H.B. 207 – Allocates \$1.2m to fund litigation against other states**
 - H.B. 248 – Electricity production standard (100% dispatchable generation)
 - H.B. 258 – Revokes utility's CPCN if fails to meet low-carbon standard (H.B. 200)
 - H.B. 259 – Amends laws relating to resource decisions and penalty revoking CPCN
- Other recent Wyoming laws being implemented:
- S.F. 159 (2019) – Requires utility to make a good faith effort to sell a coal unit it plans to retire
 - H.B. 200 (2020) – Requires the WPSC to establish a low-carbon standard for generation by 2030; low-carbon resource is defined as using carbon capture technology
- Idaho - no major bills related to electricity service in 2021

Reliability and Service Quality

- SAIDI continues to trend downwards; 20% improvement from 2017 SAIDI
- 2018, 2019, and 2020 each represented best-ever underlying performance with year-on-year improvement
- In 2020, overall performance was still impacted by two unique events which were classified as Major Events
 - March earthquake caused damage to equipment along the Wasatch Front
 - September windstorm caused significant vegetation and equipment damage leading to extended restoration efforts

Utah 365-Day Rolling Underlying History as Reported



Energy Supply Management – Summer 2020

During the summer of 2020, numerous events led to power shortages across the west.

During the week of August 14, 2020, much of the west was experiencing temperatures above normal, elevated fire risks threatened transmission lines, low hydro levels, unplanned outages at critical times, lower than forecasted wind output during critical peak hours, and cloud cover reducing solar output at times during the week.

California initiated rolling black outs on August 14 and 15, 2020. The CAISO pointed to two main causes that contributed to the problem:

- An extreme heat storm occurred across the western United States.
- Resource planning targets in California have not kept pace to lead to sufficient resources that can be relied upon to meet demand in the early evening hours.

Energy Supply Management – Winter 2021

In February of 2021, a polar vortex led to power shortages across Texas.

With extreme winter weather in the forecast for the week of February 15, 2021, the Electric Reliability Council of Texas (ERCOT) began calling for energy conservation from its customers Sunday February 14. However, by Sunday night freezing precipitation forced transmission outages and by 7:06 p.m. ERCOT had hit a new winter peak of 69,222 MW.

At its highest point, approximately 48.6% of ERCOT's power generation — 52,277 MW of the grid operator's 107,514 MW in installed capacity — was forced out due to the extreme weather conditions. This caused a critical supply shortage just as demand ramped up causing emergency conditions early Monday morning that forced the grid operator to initiate rolling outages. ERCOT's generation was not designed to operate in these extreme winter conditions.

ERCOT manages 90% of the state's electric grid, said on February 17 that 61% of the downed energy sources were from natural gas, coal, and nuclear power. Texas primarily relies on natural gas to supply the state's energy. In addition, wind energy in Texas partially failed during the storm because the extreme cold temperatures. Wind energy is responsible for a small portion of the state's power, particularly in the winter, and in this case, wind shutdowns accounted for less than 13% of total outages.

Energy Supply Management

During both events PacifiCorp was able to successfully meet its obligations because of the:

- Diversity of PacifiCorp's load across its two BA's (PACE , PACW)
- Diversity of generation across PacifiCorp two BA's – wind, coal, natural gas, solar, hydro and transmission contracts
- Diversity that allows PacifiCorp to economically dispatch its system to meet its obligations
- Proactive hedging program to meet system needs

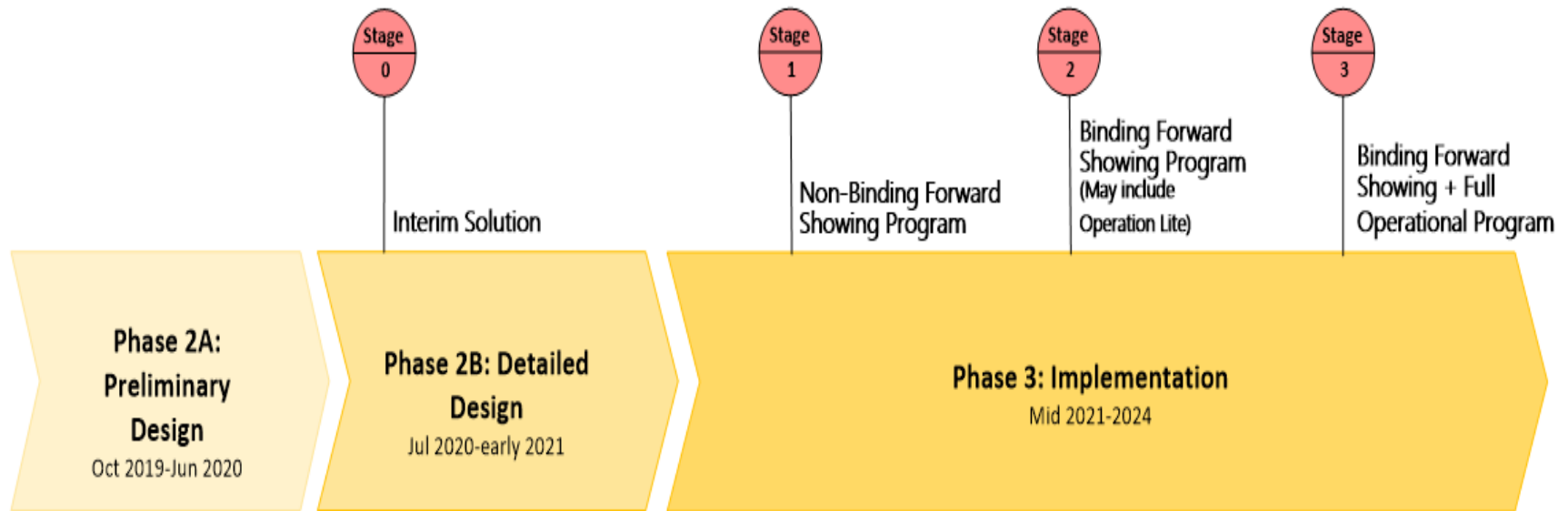
Summer event – August 17, 2020


- During this heat event Palo-Verde heavy load prices indexed ~\$1,400 / MWh and Rockies cash gas ~\$2.76 MMBtu.
- System coincident peak load (PACE + PACW) = 10,643 MW HE 1500 (7,242 MW + 3,401 MW)

Winter event – February 17, 2021

- Mid-C heavy load prices indexed ~\$191 /MWh, Palo-Verde prices ~\$375 / MWh and Rockies cash gas ~\$140 MMBtu.
- System coincident peak load (PACE + PACW) = 7,857 MW HE 0800 (4,751 MW + 3,106 MW)

NWPP Resource Adequacy Effort - Overview of Project Timeline



 When Federal Energy Regulatory Commission (FERC) jurisdiction would be triggered

NWPP Resource Adequacy Effort – Next Steps

- Continue work on detailed design
- Address governance structure
- Continue state and stakeholder engagement
- Implementation of first stage expected mid-2021

DOWNLOAD

Conceptual Design document

<https://www.nwpp.org/resources/resource-adequacy-program-conceptual-design>

Regulatory Update

Wildfire Cost and Compliance Report – first report June 1

Electric Vehicle Program Filing

Community Renewable Energy Program

All-Source RFP

Multi-State Process Reassignment filing - February 2022

Klamath Hydroelectric Settlement Agreement Update