

# PacifiCorp's 2021 Integrated Resource Plan (IRP) Overview



Utah Public Service Commission  
2021 IRP Technical Conference – January 19, 2022  
Docket No. 21-035-09

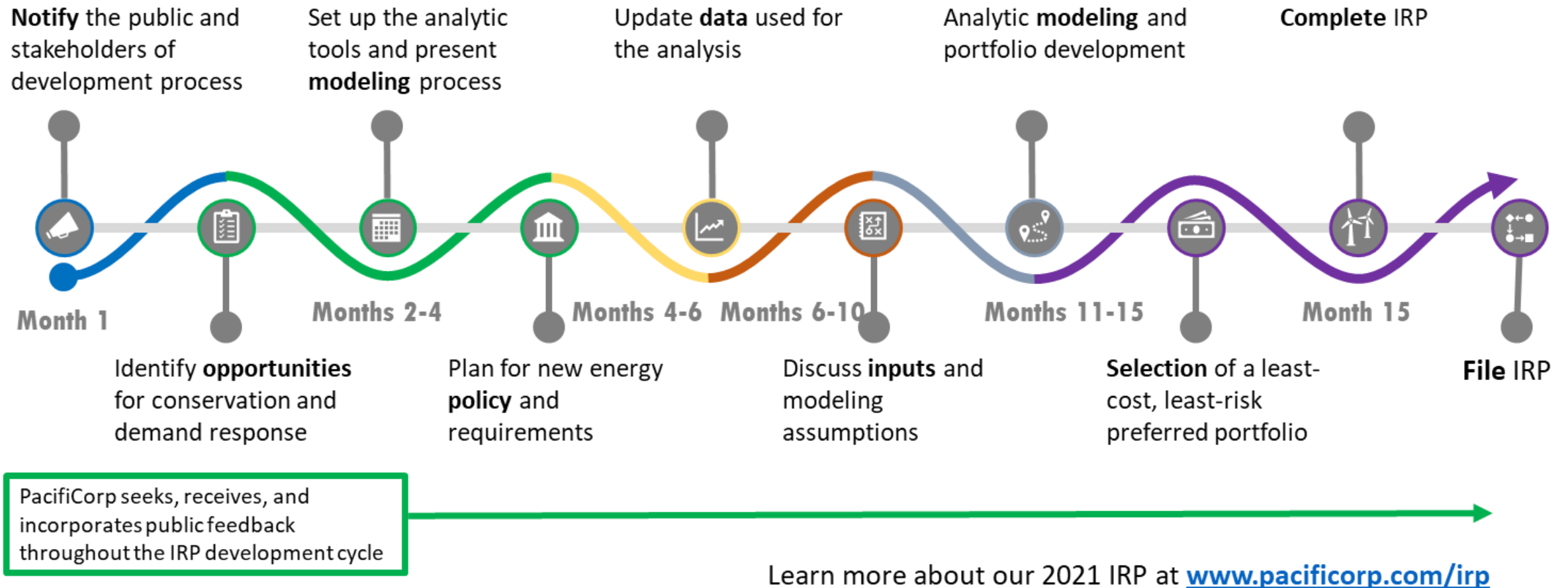
# 2021 IRP Summary

## Putting Our Shared Vision To Work For Our Customers

- IRP is a commitment to deliver reliable, affordable power to customers bolstered by innovations in power generation and storage that will help decarbonize our portfolio and increase reliability.
- A vision, with clear, measurable steps that will connect the region to its energy generation and leverage our transmission infrastructure across our six-state service area.
- By investing in resilience, through expanded transmission lines, a hardened grid, and a diverse, increasing clean portfolio, we are delivering on our commitment to ensure safe, reliable, affordable power for our customers, now and for generations to come.



# Overview of PacifiCorp's IRP Development Process





# 2021 IRP Near-Term Actions Overview

PacifiCorp's 2021 Integrated Resource Plan (IRP) builds upon the results of the 2017 and 2019 IRPs and identifies new investments including those in renewable energy, advanced nuclear, storage, demand response, energy efficiency, and modernized transmission.

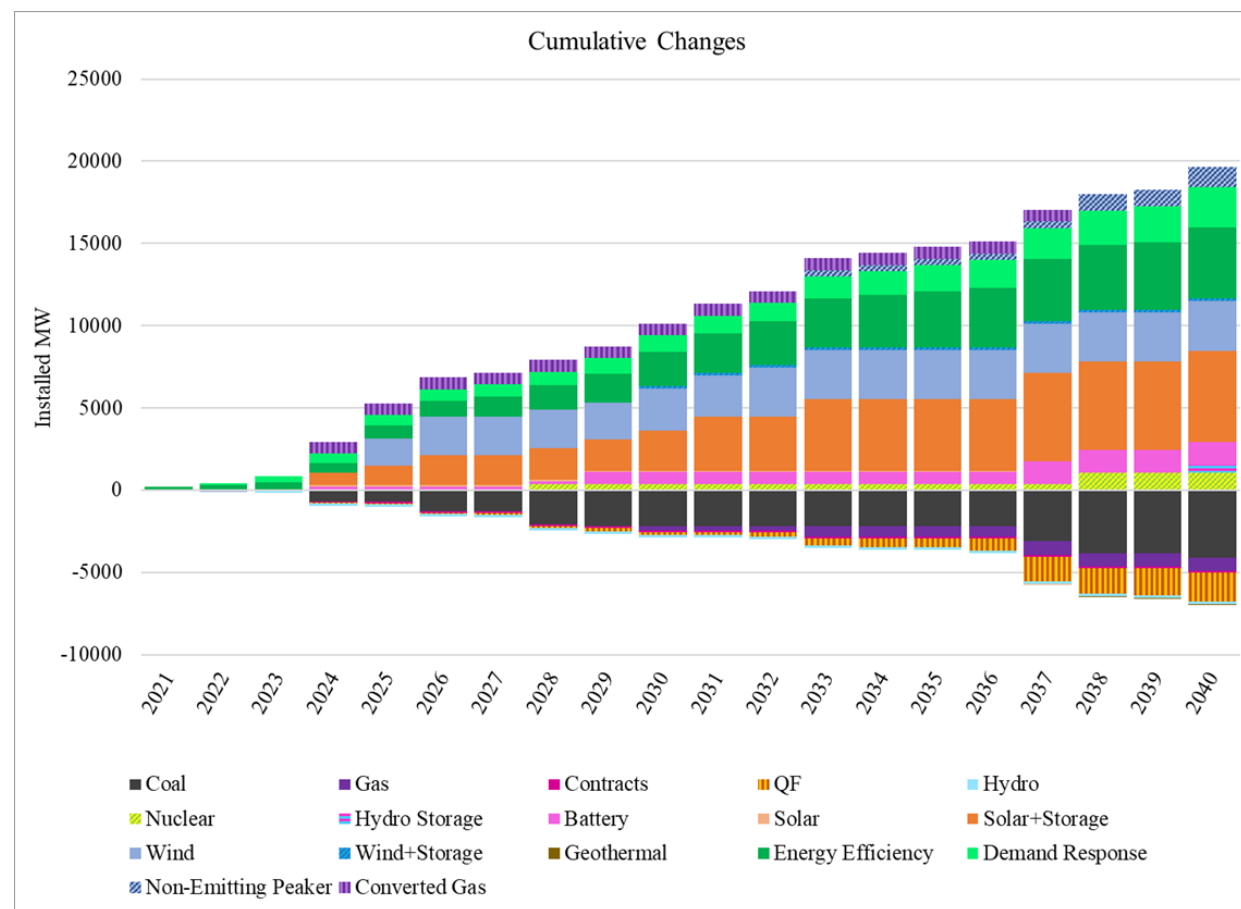
- 3,294 megawatts (MW) of **renewables with storage** capacity through 2024
- Approximately 2,000 MW of additional **renewables with storage** capacity by the end of 2026
- 500+ MW of new **energy efficiency**
- 550+ MW of **demand response** programs
- High-voltage **transmission** projects
- 500 MW advanced **nuclear** demonstration project in Wyoming by 2028



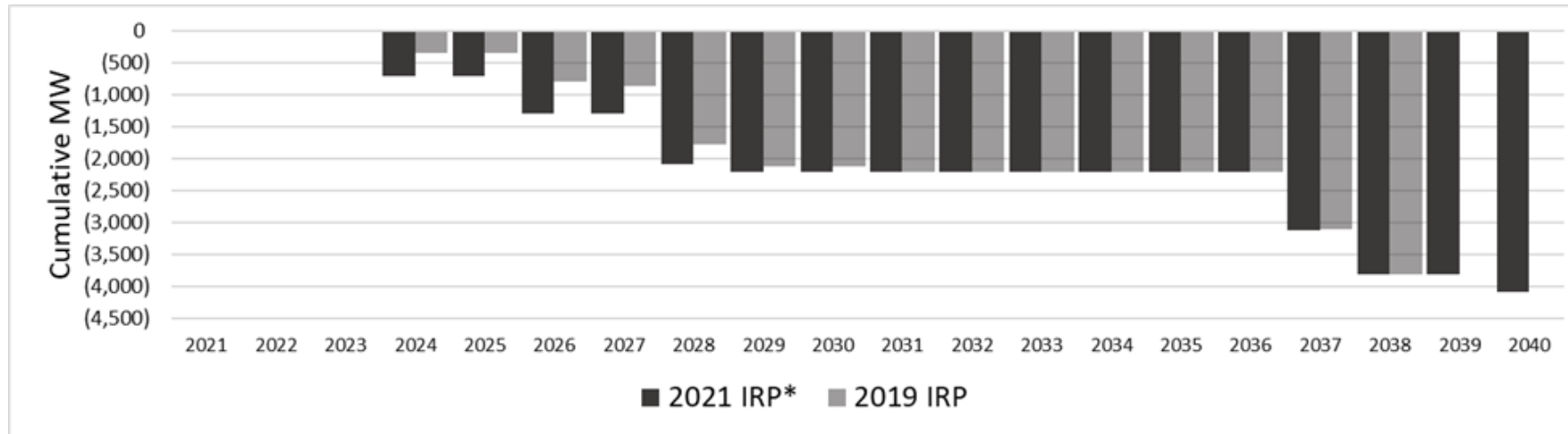
# 2021 IRP 20-Year Preferred Portfolio

The 2021 IRP is a road map of PacifiCorp's bold vision for the west between now and 2040 and sets us on the path to continue growth into a grid powered by clean energy

- 4,290 MW of incremental savings through energy efficiency programs.
- 5,628 MW of new solar resources (most paired with storage).
- 3,628 MW of new wind resources.
- 4,181 MW of storage collocated with solar resources, 1,400 MW standalone battery storage and a 500 MW pumped hydro storage project.
- 2,448 MW of direct load control programs.
- 500 MW of advanced nuclear in 2028 (Natrium™ demonstration project), with another 1,000 MW of advanced nuclear over the long term.



# Coal Retirements/Gas Conversions (P02-MM-CETA)



\* Note: Coal retirements are assumed to occur by the end of the year before the year shown in the graph. The graph shows the year in which the capacity will not be available for meeting summer peak load. All figures represent PacifiCorp's ownership share of jointly owned facilities.

- Driven in part by ongoing cost pressures on existing coal-fired facilities and dropping costs for new resource alternatives, of the 22 coal units currently serving PacifiCorp customers, the preferred portfolio includes retirement of 14 of the units by 2030 and 19 of the units by the end of the planning period in 2040.
- Coal unit retirements/gas peaking unit conversions in the 2021 IRP preferred portfolio will reduce coal-fueled generation capacity by 1,300 MW by the end of 2025, over 2,200 MW by 2030, and over 4,000 MW by 2040.
- PacifiCorp's coal resources will continue to play a pivotal role in following fluctuations in renewable energy as the remaining coal units approach retirement dates.

# Investments to Modernize Transmission Network

- Connects new diverse, clean resources to customers.
- Delivers full benefits of the Energy Imbalance Market by further connecting western markets.
- Increases grid resiliency and reliability. Specific projects include:
  - Energy Gateway South – 500 kV
  - New 230 kV transmission line in Wyoming (D1)
  - Boardman to Hemingway – 500 kV



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

# Investments to Ensure a Reliable Electrical Grid

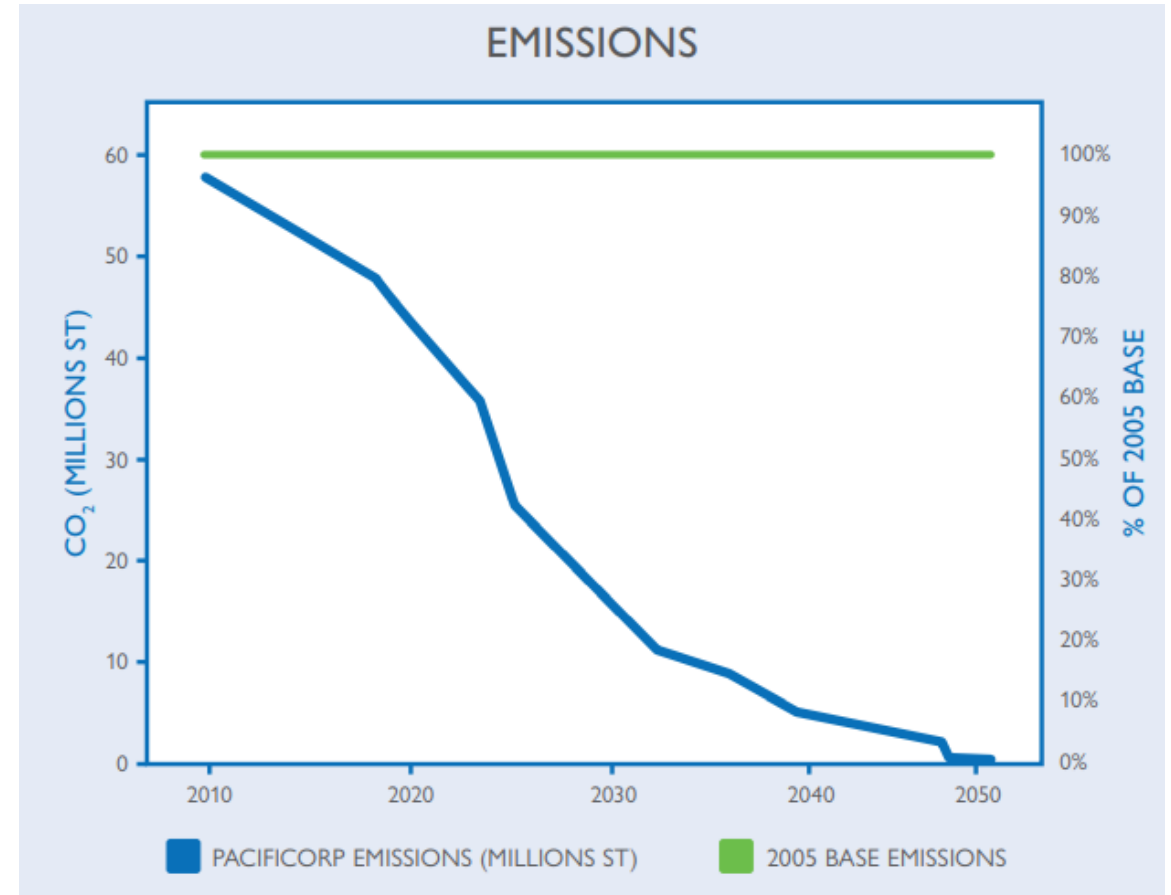
- Advanced nuclear resource anticipates a clean baseload resource planned for 2028:
  - Industry leading design
  - Utilize local workforce
  - Safe and secure
- Conversion of Jim Bridger units 1 and 2 to natural gas by 2024.
- Battery and hydro pumped storage projects increase system flexibility and support system reliability.
- Championing technical innovations that use demand response programs to support the bulk power system.





# Reduction in Greenhouse Gas Emissions

- 74% reduction in greenhouse gas emissions from 2005 levels by 2030, increasing from a 59% reduction outlined in the 2019 plan.
- 98% reduction in greenhouse gas emissions from 2005 levels by 2050.



A young boy with light hair, wearing a plaid shirt and a backpack, stands with his arms raised in a gesture of joy or triumph. He is positioned in the center-right of the frame. In the background, several large wind turbines are visible against a clear blue sky. The turbines are slightly out of focus, emphasizing the boy. A red geometric shape is visible in the top right corner.

# Questions?

[www.pacificorp.com/energy/integrated-resource-plan](http://www.pacificorp.com/energy/integrated-resource-plan)