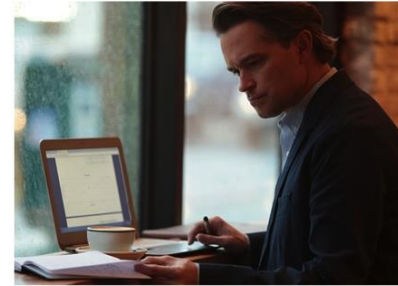


# **Attachment A**

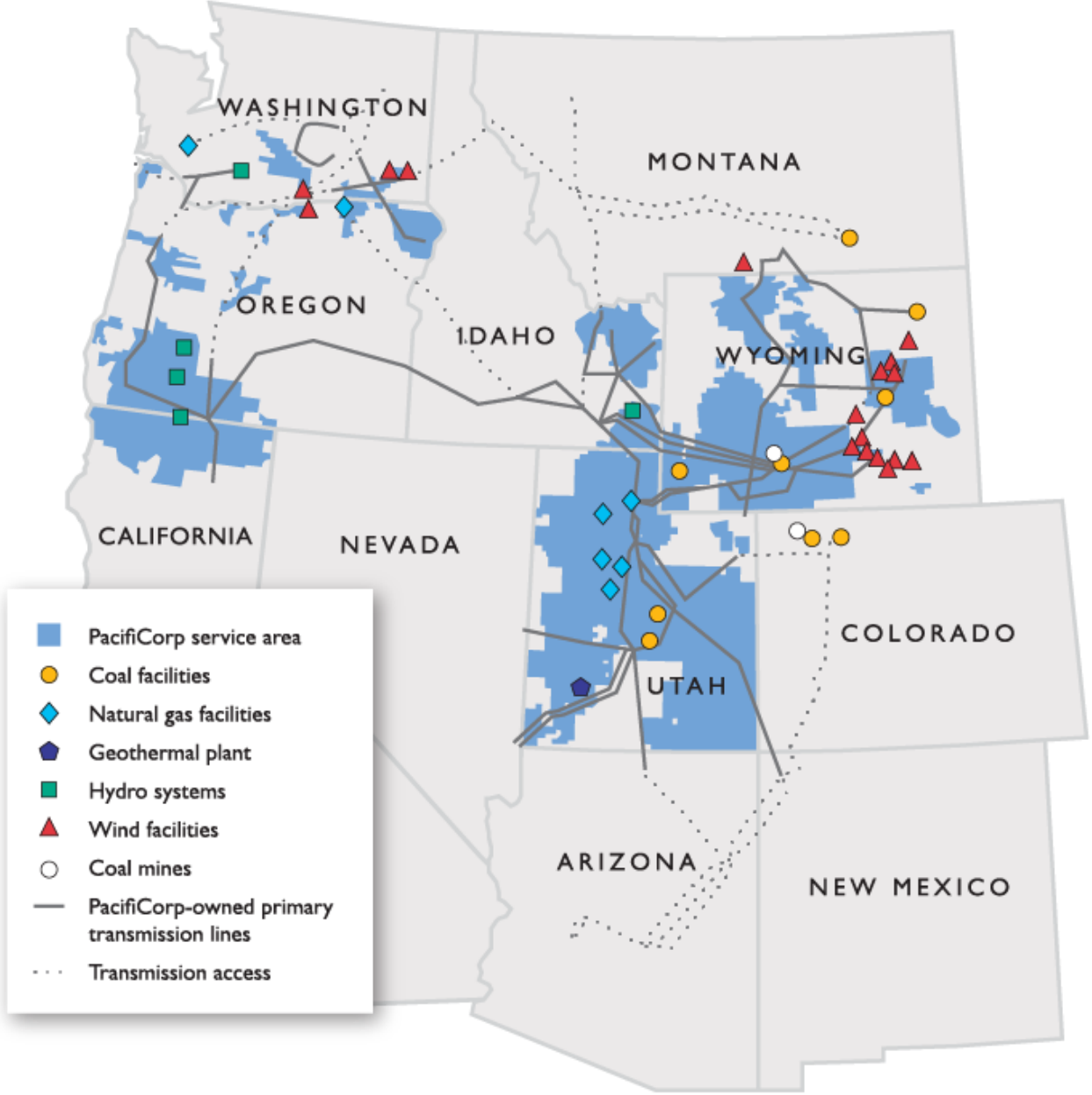
# PacifiCorp's 2021 Integrated Resource Plan (IRP)

Washington Recessed Open Meeting

May 25, 2021



# PacifiCorp Overview



- PacifiCorp serves approximately 1.9 million customers across six states
- Rocky Mountain Power serves Utah, Idaho and Wyoming customers
- Pacific Power serves Oregon, Washington and California customers
- Extensive generation, transmission and distribution infrastructure across the west
- Large decarbonization efforts underway
- Extensive energy efficiency portfolio
- Long-term resource planning occurs in PacifiCorp’s Integrated Resource Plan

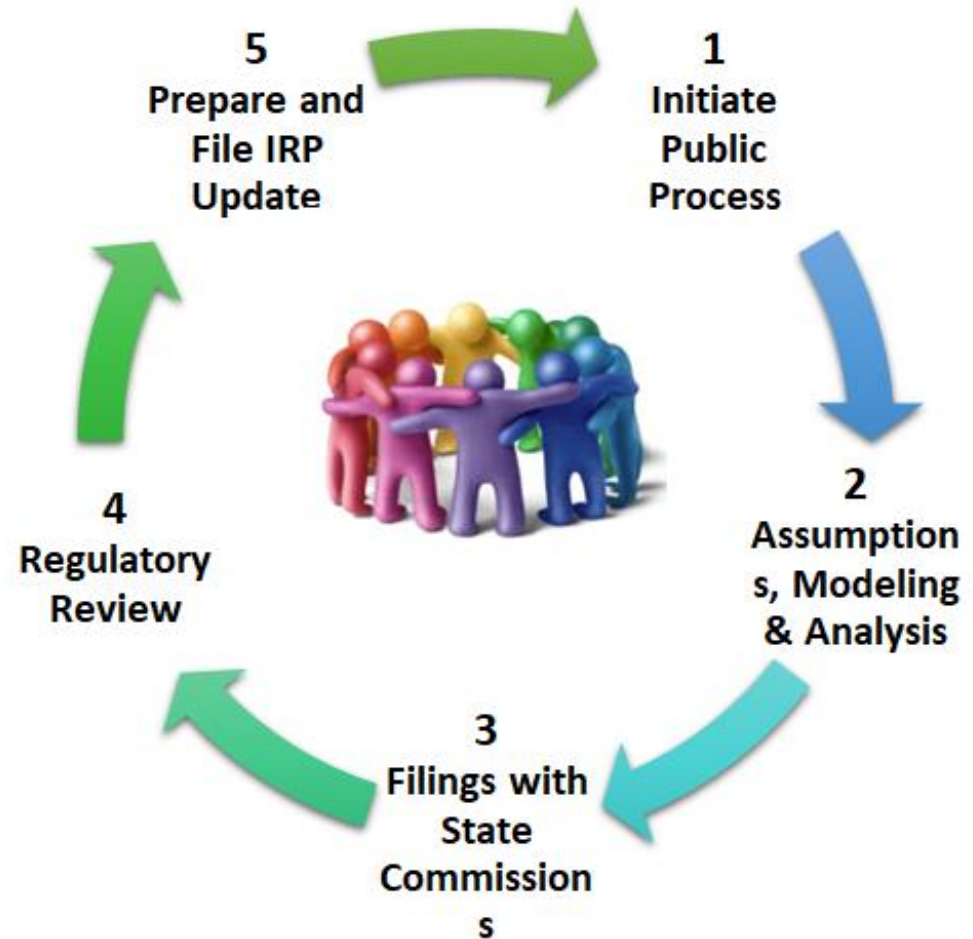
# Washington Service Territory



- Approximately 137,000 customers throughout Benton, Columbia, Garfield, Kittitas, Yakima, and Walla Walla counties
- Approximately 800MW of peak load
- Largely non-urban areas with some of the lowest median income levels in the state
- PacifiCorp actively supports and engages with local communities

# Integrated Resource Plan Process

- PacifiCorp has been producing resource plans for over two decades (what, when, where, and how much)
- Costs and risks from our customers' perspective (six states with retail load)
- PacifiCorp operates two balancing authority areas as a single system—integrated system planning aligns with this paradigm (one plan for all six states)
- 20-year planning horizon
- Two-year cycle with updates in off years
- Updates highlight how changes in the planning environment affect the plan (limited scope)



# 2021 IRP Overview

- PacifiCorp's 2021 IRP development began in January 2020 with a series of technical workshops on energy efficiency to inform the Conservation Potential Assessment
- Broader topic public-input meetings were initiated in June 2020 with topics covering the planning environment, modeling methodology, inputs and assumptions
- PacifiCorp's IRP public-input process is robust, transparent and extensive
  - 14 public-input meetings and state-specific meetings prior to kick-off held to date - four additional meetings scheduled
  - Nearly 80 stakeholder feedback forms with over 450 questions, comments and recommendations
  - PacifiCorp's IRP website maintains meeting materials, studies, stakeholder feedback forms and responses, and meeting information in addition to communications via the IRP distribution list



# Advanced Modeling

- PacifiCorp began transitioning to a new modeling system in the summer of 2020 and has continued to make progress on addressing functionality and performance issues associated with this new and advanced modeling software. However, an extension of the 2021 IRP file date was necessary due to an inability to complete model runs to establish resource portfolios and evaluate costs and risks
- Due to the progressive nature of PacifiCorp's IRP development cycle, these modeling issues could not have been anticipated until modeling efforts began in January and February 2020
- The 2021 IRP contains advancements in optimization modeling and analytics around transmission, reliability, storage, and energy efficiency in addition to other improvements in functionality and granularity
- The final 2021 IRP is on track to be submitted no later than September 1, 2021, and will account for final shortlist results from the 2020 All-Source Request for Proposals and Demand Response Request for Proposals to be finalized in June 2020



# 2021 IRP Washington Filings

- On January 4, 2021, PacifiCorp filed its Draft 2021 IRP filing
- On April 1, 2021, the company filed an interim IRP, which included:
  - Draft qualitative description of planning environment and available IRP components (excluding quantitative portfolio and risk analysis)
  - Draft of the 10-year Clean Energy Action Plan (CEAP)
  - Updated 2021 IRP workplan and description of additional public-input meetings to support a September 1, 2021 final filing date
  - Draft of the Equity Advisory Group (EAG) participation plan
- On May 1, 2021, the company filed its Clean Energy Implementation Plan (CEIP) public participation plan
  - PacifiCorp is progressing on development of the 2022 CETA-compliant Clean Energy Implementation Plan (CEIP)



# Equity Advisory Group (EAG)

- First meeting of the EAG was held virtually on May 13, 2021 and anticipated to be held monthly through filing of the 2022 CEIP
- EAG membership includes representatives from tribal government, community-based organizations, educational institutions, and local non-profits
- Topics discussed include background presentations on PacifiCorp and CETA, discussion of key definitions and terms, and initial breakout group discussions to highlight perspectives on the work of the EAG
- Working to further expand membership, refine public participation opportunities and finalize a charter for the advisory group
- EAG meeting information, and additional resources related to CETA, CEAP and CEIP development work can be found on PacifiCorp's webpage at:

[pacificorp.com/energy/washington-clean-energy-transformation-act-equity.html](https://pacificorp.com/energy/washington-clean-energy-transformation-act-equity.html)



ENERGY TRANSMISSION ENVIRONMENT COMMUNITY

## Energy

Integrated Resource Plan

Wind & solar

Hydro

Thermal

Grid modernization

Private generation

Washington CEIP

## Our path to 100% renewable and non-emitting energy and equitable distribution of benefits in Washington

In May 2019, Washington state Governor Jay Inslee signed into law the Clean Energy Transformation Act (CETA) that applies to all electric utilities serving retail customers in Washington and sets specific milestones to reach the required 100% clean electricity supply. PacifiCorp is committed to an open, transparent, and accessible process to ensure that the transition to renewable and non-carbon-emitting electricity milestones in Washington are achieved equitably among its Washington customers and communities.

To join the distribution list to learn more about these important efforts, or for questions regarding the information provided below, please email us at [CEIP@PacifiCorp.com](mailto:CEIP@PacifiCorp.com).



### Overview of the Clean Energy Transformation Act

Passed in 2019, the Clean Energy Transformation Act sets ambitious clean energy targets for Washington's energy future:

- By 2025 utilities remove coal-fired generation from Washington's allocation of electricity;
- By 2030, utilities' energy mix in Washington will be carbon-neutral;
- By 2045, utilities' energy mix in Washington will be 100% renewable and non-carbon-emitting

Along with these clean energy targets, utilities in Washington must ensure that its customers and communities are benefiting equitably from the transition to renewable energy. PacifiCorp is leading this effort through its newly formed Equity Advisory Group (EAG) to ensure that the health, safety, and well-being of our customers and communities is included in the planning process.

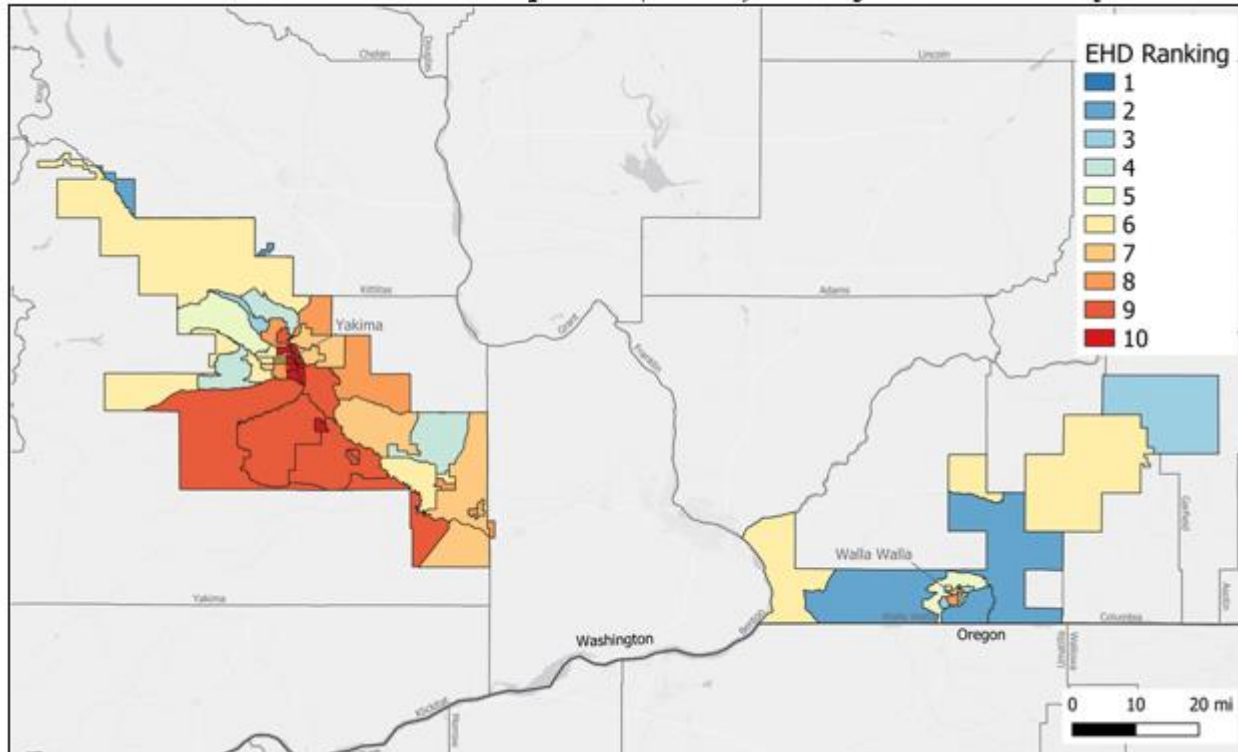
### Clean Energy Action Plan (CEAP)

The CEAP is part of PacifiCorp's 20-year, long-term planning document, known as the **Integrated Resource Plan or IRP**, and provides a Washington-specific look at what resources may be added or retired from the state's allocation of electricity over the next 30 years. Ensuring that the power grid can deliver electricity reliably, safely, and at the lowest cost possible often requires planning far in advance. The CEAP provides a way to look at the mix of resources PacifiCorp plans to serve its Washington customers and communities in the next ten years progressing toward a renewable energy and non-carbon-emitting energy future. In addition to listing potential investments in PacifiCorp's Washington service territory, the CEAP also

PacifiCorp's CEIP Public Participation Webpage

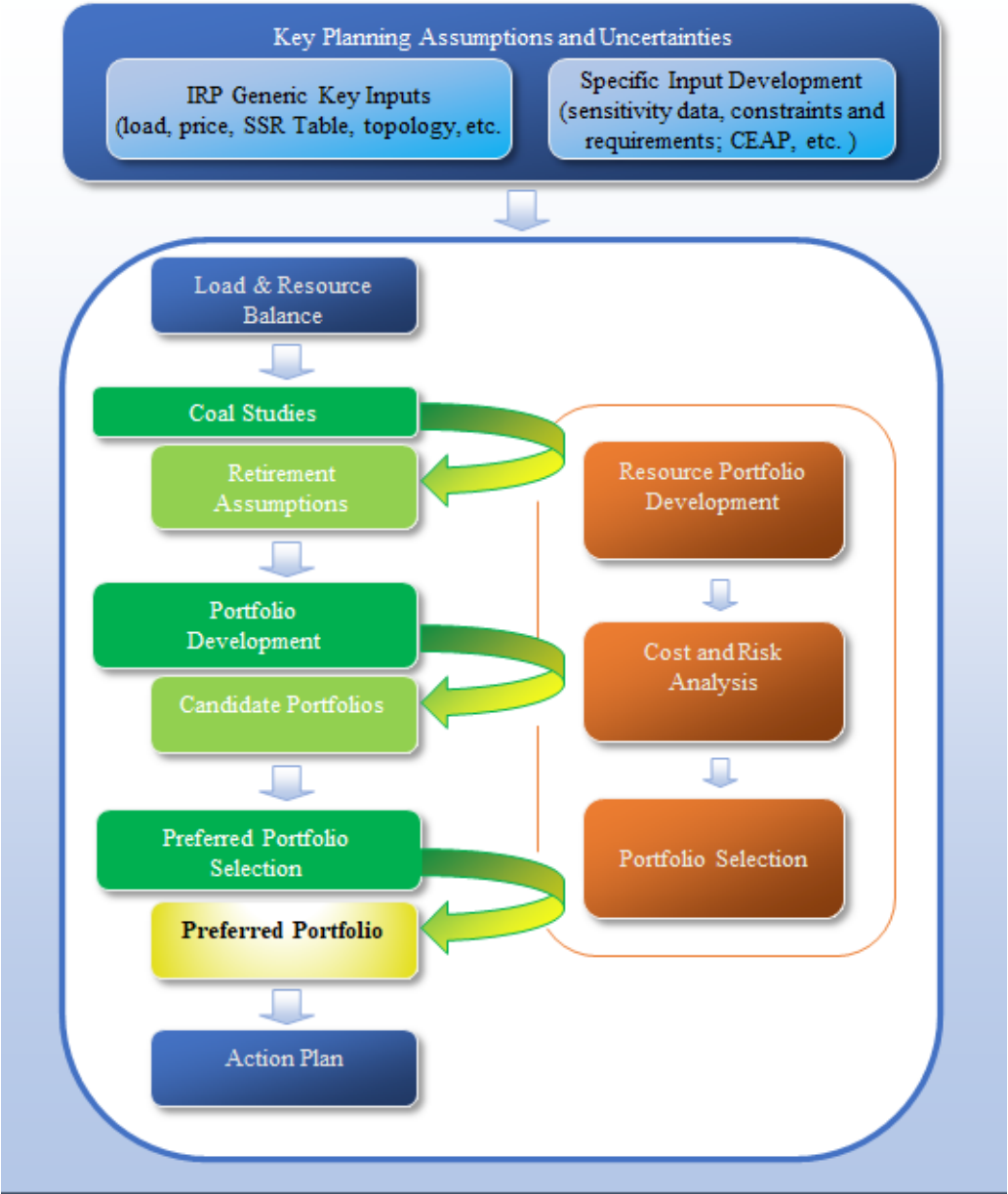
# Vulnerable and Highly-Impacted Communities

*WTN Data – Environmental Health Disparities (Overall) in Pacific Power Territory*



- Interim CEAP filed April 1 included community health analyses in Yakima and Walla Walla
- PacifiCorp used the Cumulative Impact Analysis criteria to discuss the health and well-being of communities regarding environmental exposures, environmental effects, socioeconomic factors, and sensitive populations
- The 2021 IRP CEAP will include the preferred portfolio and a discussion of the impacts on Washington customers to be filed September 1, 2021
- PacifiCorp is continuing to work with stakeholders to ensure that the final CEAP is compliant with CETA rules and accurately informs the 2022 CEIP

# Portfolio Development



- Resource expansion plan modeling, performed with the PLEXOS LT model, is used to produce resource portfolios with sufficient capacity to achieve a target loss of load probability over the 20- year study horizon. Each resource portfolio is uniquely characterized by the type, timing, location, and number of new resources in PacifiCorp’s system over time
- PacifiCorp has identified a preliminary set of 25 unique initial portfolios – each to be assessed using the MM, MN, LN and HH price-policy assumptions
- Portfolios generated with SC-GHG price-policy assumptions are consistent with RCW19.280.030 in Washington
- Additional cases may be developed once preliminary results are available (i.e., as required to achieve RPS targets or Clean Energy Transformation Act requirements)

# Preliminary 2021 Portfolio Development Cases

Case "Name"	Price-Policy	Existing Coal	Existing Gas	Other Existing Resources	Proxy Resources
BAU1-MM	MM	End of Life	End of Life	End of Life	Optimized
BAU1-MN	MN	End of Life	End of Life	End of Life	Optimized
BAU1-LN	LN	End of Life	End of Life	End of Life	Optimized
BAU1-HH	HH	End of Life	End of Life	End of Life	Optimized
BAU1-SC-GHG	SC-GHG	End of Life	End of Life	End of Life	Optimized
BAU2-MM	MM	2019 IRP	2019 IRP	2019 IRP	2019 IRP+
BAU2-MN	MN	2019 IRP	2019 IRP	2019 IRP	2019 IRP+
BAU2-LN	LN	2019 IRP	2019 IRP	2019 IRP	2019 IRP+
BAU2-HH	HH	2019 IRP	2019 IRP	2019 IRP	2019 IRP+
BAU2-SC-GHG	SC-GHG	2019 IRP	2019 IRP	2019 IRP	2019 IRP+
P01-MM	MM	Optimized	End of Life	End of Life	Optimized
P01-MN	MN	Optimized	End of Life	End of Life	Optimized
P01-LN	LN	Optimized	End of Life	End of Life	Optimized
P01-HH	HH	Optimized	End of Life	End of Life	Optimized
P01-SC-GHG	SC-GHG	Optimized	End of Life	End of Life	Optimized

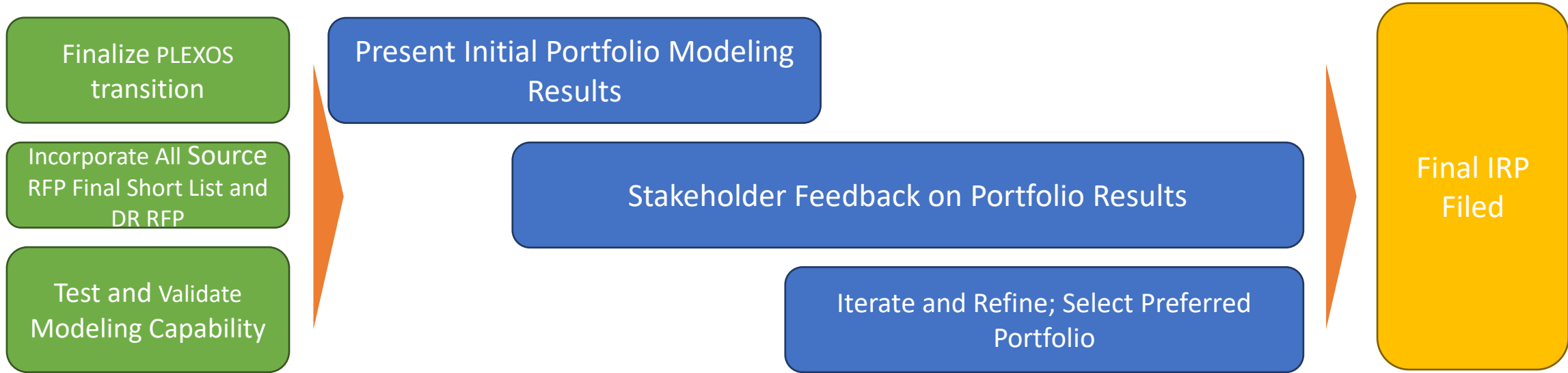
# Preliminary 2021 Portfolio Development Cases (continued)

Case "Name"	Price-Policy	Existing Coal	Existing Gas	Other Existing Resources	Proxy Resources
P02-MM	MM	Optimized	End of Life	End of Life	No New Gas
P02-MN	MN	Optimized	End of Life	End of Life	No New Gas
P02-LN	LN	Optimized	End of Life	End of Life	No New Gas
P02-HH	HH	Optimized	End of Life	End of Life	No New Gas
P02-SC-GHG	SC-GHG	Optimized	End of Life	End of Life	No New Gas
P03-MM	MM	Retired by 2030	End of Life	End of Life	No New Gas
P03-MN	MN	Retired by 2030	End of Life	End of Life	No New Gas
P03-LN	LN	Retired by 2030	End of Life	End of Life	No New Gas
P03-HH	HH	Retired by 2030	End of Life	End of Life	No New Gas
P03-SC-GHG	SC-GHG	Retired by 2030	End of Life	End of Life	No New Gas

## Washington-specific portfolio requirements:

Requirement	Summary
Alternative Lowest Reasonable Cost	Analysis of lowest reasonable cost portfolio that the utility would have implemented if not for compliance with CETA requirements.
Future Climate Change	Analysis should incorporate best available science on impacts of snowpack, streamflow, rainfall, heating/cooling degree days, and load changes from climate change.
Maximum Customer Benefit	Scenario should model customer benefit (per RCW 19.405.040(8)) prior to balancing against other goals.

# Next Steps Timeline and Public Outreach



## June

2020 All Source RFP Final Short List available, IRP Public Input Meeting Planned for June 24-25

## July

Continued public participation opportunities; IRP Public Input Meeting planned for July 29-30

## August

Public Input Meeting planned for August 12, if needed

## September

Final IRP filed on September 1

# Additional Information & Next Steps

- Public Input Meeting and Workshop Presentation and Materials:
  - [pacificorp.com/energy/integrated-resource-plan/public-input-process](https://pacificorp.com/energy/integrated-resource-plan/public-input-process)
- 2021 IRP Stakeholder Feedback Forms:
  - [pacificorp.com/energy/integrated-resource-plan/comments](https://pacificorp.com/energy/integrated-resource-plan/comments)
- IRP Email / Distribution List Contact Information:
  - [IRP@PacifiCorp.com](mailto:IRP@PacifiCorp.com)
- IRP Support and Studies:
  - [pacificorp.com/energy/integrated-resource-plan/support](https://pacificorp.com/energy/integrated-resource-plan/support)