IRP stakeholder meeting

Energy planning process next steps for 2022

January 20, 2022

PUGET SOUND ENERGY

Safety moment

Driving in inclement weather

- Check headlights and clean dirty covers
- Check all vital fluids and tire air pressure
- Keep an emergency kit in your car
- Avoid using cruise control in icy conditions
- Keep your fuel tank filled or car fully charged
- Increase your following distance

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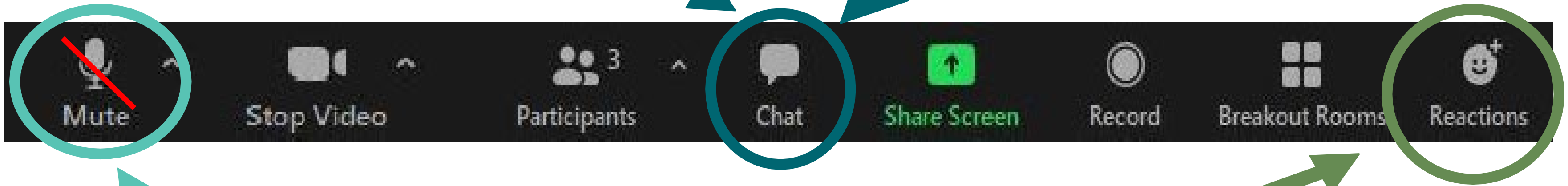
If you **have a technical issue or a general question**, please type it in the chat box.



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If you want to **ask a question verbally,** click the 'Reaction' button and click on the **'Raise Hand'** option and we will call on you.

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Facilitator Requests

- Engage constructively and courteously towards all participants
- Respect the role of the facilitator to guide the group process
- “Take space and make space”
- Avoid use of acronyms and explain technical questions

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Agenda

Time	Topic	Speaker(s)
1:10 – 1:20 p.m.	Overview for today	Phillip Popoff and Kara Durbin
1:20 – 1:40 p.m.	Update on CEIP	Brian Tyson
1:40 – 2:00 p.m.	2023 Electric IRP Progress Report and Gas Utility IRP work plans	Elizabeth Hossner
2:00 – 2:10 p.m.	*Break*	*All*
2:10 – 2:50 p.m.	Reflecting climate change in load forecasting	Allison Jacobs
2:50 – 3:15 p.m.	Conservation Potential Assessment	Gurvinder Singh
3:15 – 3:45 p.m.	Small group discussion	All
3:45 – 4:00 p.m.	Next steps	Sophie Glass

Today's Speakers

Phillip Popoff
Director, Resource Planning Analytics, PSE

Kara Durbin
Director, Clean Energy Strategy, PSE

Brian Tyson
Manager, Clean Energy Planning and Implementation, PSE

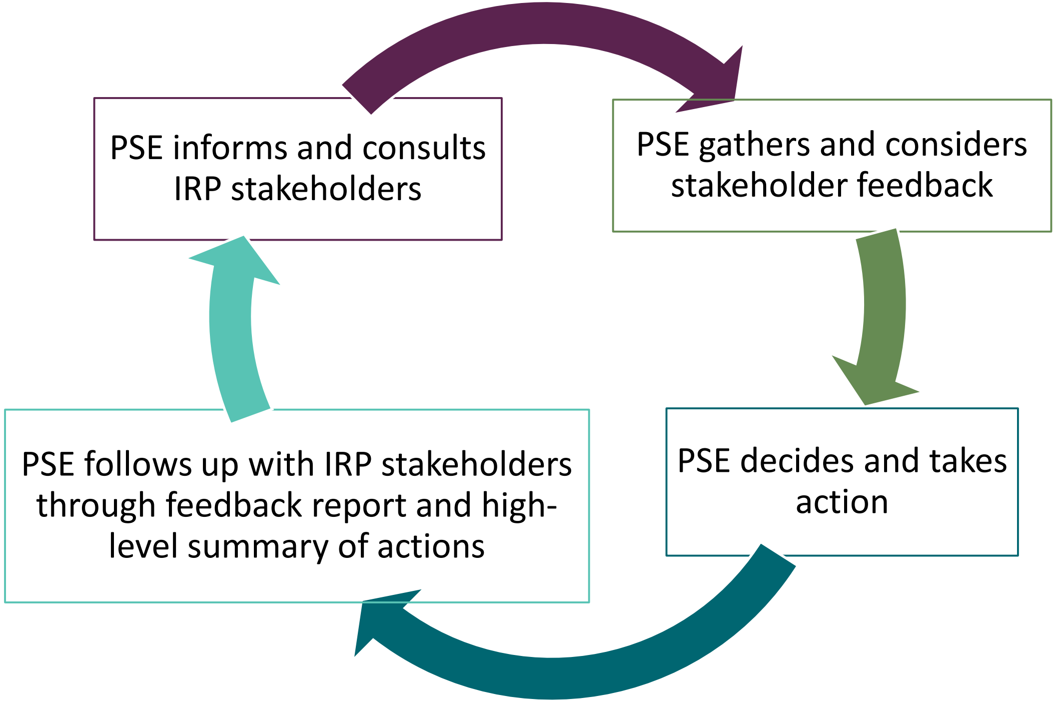
Elizabeth Hossner
Manager, Resource Planning and Analysis, PSE

Allison Jacobs
Senior Economic Forecasting Analyst, Load Forecasting, PSE

Gurvinder Singh
Consulting Resource Planning Analyst, Resource Planning and Analysis, PSE

Sophie Glass & Lucila Gambino
Co-facilitators, Triangle Associates

Engaging IRP stakeholders



Overview for Today

Phillip Popoff, Director of Resource Planning Analytics, PSE

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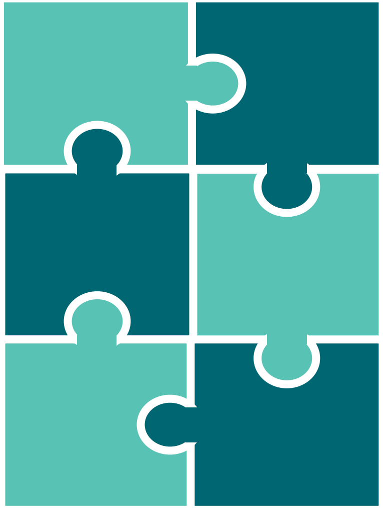
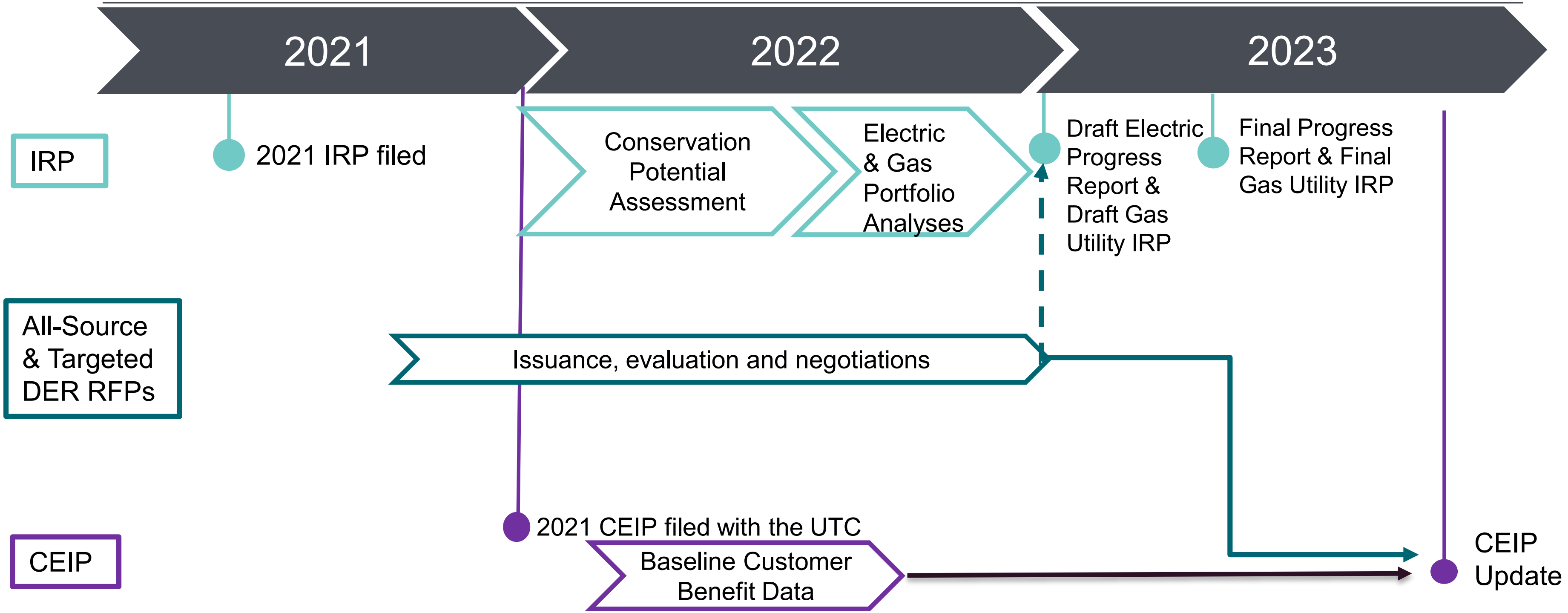
Energy resource planning

What is integrated resource planning?

- Process **evaluating customer energy needs over the next 20 years and ways for PSE to meet those needs** to provide clean, safe and reliable energy
- Analyses consider regulatory policies, costs, economic conditions, weather conditions, physical energy systems, etc.
- An Integrated Resource Plan (IRP) serves **as the starting point for making decisions about resources** that *may* be procured in the future



Zooming out: timing for this inaugural IRP/CEIP cycle



UTC: Washington Utilities and Transportation Commission

Zooming in: implementation and reporting

For 2022, our energy planning process will focus on:

Clean Energy Implementation Plan

We will continue to engage on CEIP elements and begin implementation

2023 Electric Progress Report

- New CETA requirement
- Provides two-year progress report on 2021 IRP
- Results will inform 2023 Biennial CEIP Update

2023 Gas Utility IRP

- Separate IRP focused on needs of natural gas sales customers
- Helps meet our goal of being a Beyond Net Zero Carbon energy company by 2045

Clean Energy Implementation Plan Update

Kara Durbin, Director of Clean Energy Strategy, PSE

Brian Tyson, Manager of Clean Energy Planning and Implementation, PSE

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PSE's first Clean Energy Implementation Plan (2022-2025)

- Defines targets to achieve our clean electricity goals
- Identifies how all customers benefit with focus on highly impacted communities and vulnerable populations
- Uses customer benefits to shape our resource decisions and enhance the clean electricity transition
- Lists specific actions, programs and investments
- Maintains reliability and affordability
- Describes how we engaged customers in our efforts
- Holds PSE accountable to future work and commitments

How IRP stakeholder input from Nov. 3 shaped the CEIP

Themes heard at Nov. 3 meeting	What we did with it
Feedback heard from IRP stakeholders: • Speed up the clean electricity transition, specifically renewables to address urgency of climate change • Update generic resource costs • Customer benefit indicator (CBI) prioritization and advisory group input • Make CEIP standalone that doesn't require jumping to supporting documents • Request that PSE share All-Source Request for Proposal (RFP) costs • Accelerate deployment and increase the amount of distributed energy resources (DER) • Program suggestions to: increase implementation of time-varying rates; use grid integrated water heaters; and explore on-bill financing • Concerns about feasibility to deliver on renewables, as well as 2026 peaking capacity needs	**PSE used stakeholder feedback to make changes to CEIP:** • Accelerated the transition and increased renewable energy ramp up rate – with 63% of our electric supply from renewable or non-emitting resources by 2025 • Updated generic resource costs to National Renewable Energy Laboratory's updated Annual Technology baseline • Added a commitment to continue to work on CBI scoring and weighting methodology for next CEIP • Worked to balance level of specificity and embedding links in the CEIP PSE addressed considerations with costs, sharing All-Source RFP costs, CBI prioritization, implementation of time-varying rate pilots, on-bill financing, DER programs, and other concerns in Appendix C-2.

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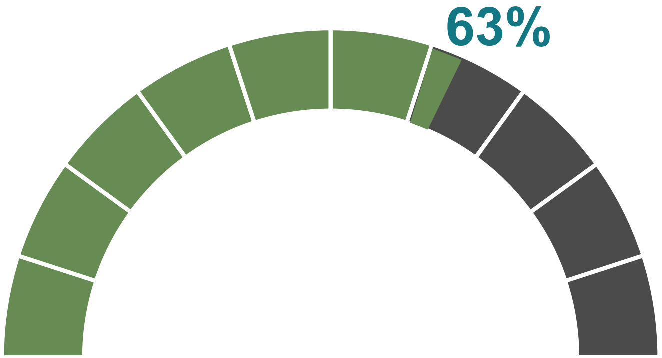
Targets to achieve our clean electricity goals in 2025

Interim clean electricity target



PSE clean electricity portfolio forecast by **end of 2025***

**measured as a % of net retail load*

Specific targets

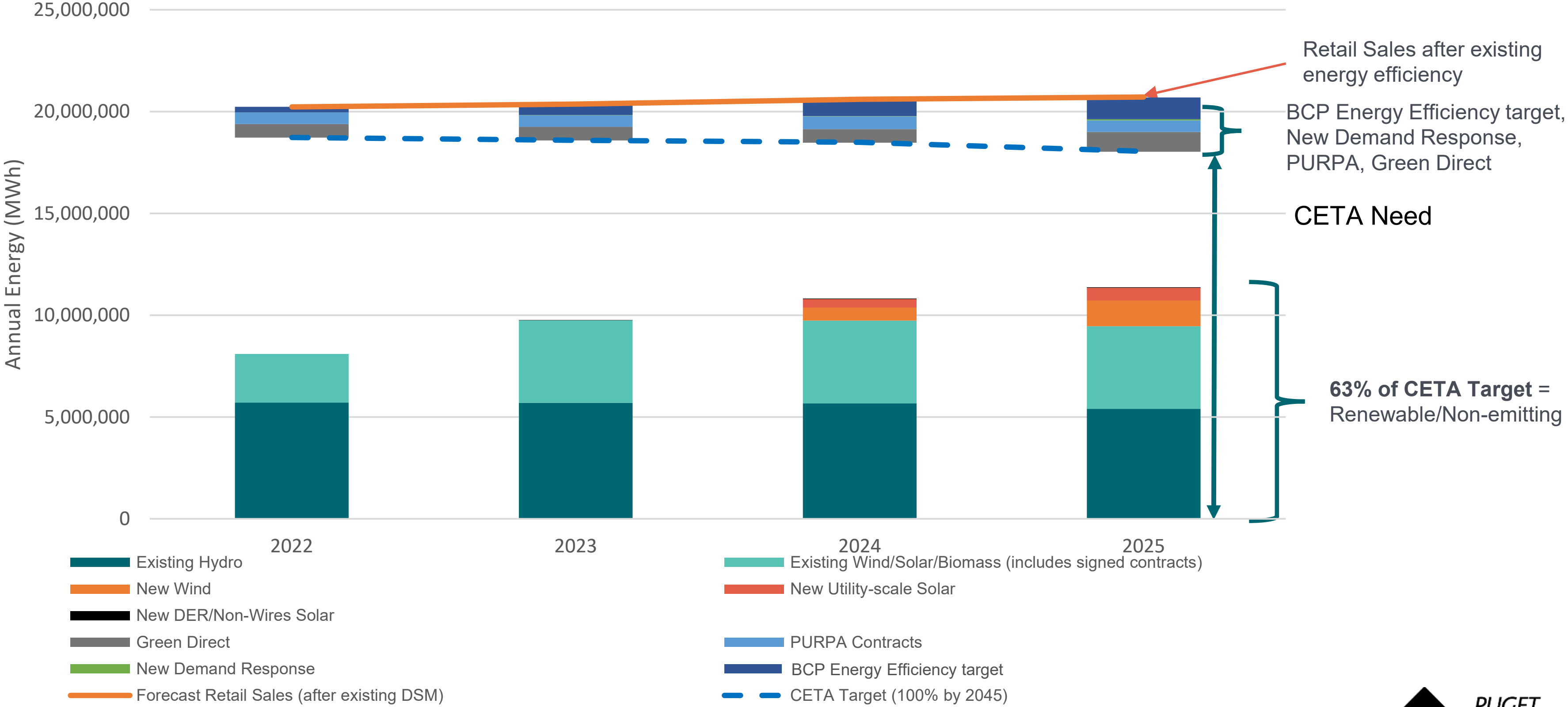
Energy Efficiency: 1,073,434 MWh for 2022-2025
Equivalent to electricity used by more than 138,000 homes in one year

Demand response: 23.7 MW
New programs incentivizing shifting energy use during peak periods

Renewable Energy: 63% of retail sales in 2025

- *Large-scale generation, like wind and solar*
- *2x as much local solar and battery programs than today*

2022-2025: CETA clean electricity mix



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** BCP – Biennial Conservation Plan*
PURPA – Public Utility Regulatory Policies Act Qualifying Facility

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Customer benefit indicators shape outcomes

Highly impacted communities and vulnerable populations (named communities)

Energy benefits
- Improved participation in clean energy programs from named communities

Reduction of burdens
- Improved participation in clean energy programs from named communities
- Improved affordability of clean energy
- Increase in culturally- and linguistically-accessible program communications for named communities

Non-energy benefits
- Improved participation in clean energy programs from named communities
- Increase in quality and quantity of clean energy jobs
- Improved home comfort

All PSE customers (including highly impacted communities and vulnerable populations)

Public health
- Improved outdoor air quality
- Improved community health

Energy security
- Improved access to reliable clean energy

Environment
- Reduction of greenhouse gas emissions
- Reduction of climate change impacts

Risk reduction
- Reduction of climate change impacts
- Improved access to reliable clean energy

Cost reduction
- Improved affordability of clean energy

Resiliency
- Decrease frequency and duration of outages

For the customer benefit indicator metrics, reference CEIP Table 3-6

Customer benefit indicators:

- Outcomes that improve our customers' lives
- Shape program, actions and investment decisions
- Help ensure all customers benefit from the clean energy transition

Summary of actions that move us forward

	2022	2023	2024	2025
Resource specific (projected)	• Energy Efficiency Programs	• Energy Efficiency Programs	• Energy Efficiency Programs	• Energy Efficiency Programs
	• Complete Targeted DER RFP	• Start Demand Response Programs	• Expand Demand Response programs	• Expand Demand Response programs
	• 200 MW Golden Hills wind in service* • 100 MW BPA capacity product* • 32.8 MW Colville and 76.6 MW Chelan hydro contracts* • Complete All-Source and Targeted DER RFPs • 7 MW of DER solar in service	• 350 MW Clearwater Wind in service* • 23 MW of DER solar in service • 5 MW of distributed battery storage in service	• 200 MW of wind in service • 200 MW of solar in service • 25 MW of utility-scale storage • 25 MW of DER solar in service • 7 MW of distributed battery storage in service	• 300 MW of wind in service • 100 MW of solar in service • 25 MW of utility-scale storage • 25 MW of DER solar in service • 13 MW of distributed battery storage in service
Other investments	• Begin tariff filings for DER programs • Customer-centered program design • Baseline data collection for CBIs • Enabling technologies planning	• Tariff filings for DER programs • Build and deploy new DER and DR programs • Initial customer programs and education launch • Begin installing enabling technologies • Progress reporting and biennial CEIP Update	• Utility-scale renewables and DERs in service • Progress reporting • Ongoing programs and education • Ongoing installation of enabling technologies	• Utility-scale renewables and DERs in service • Ongoing programs and education • Ongoing installation of enabling technologies • File 2026–2029 CEIP

** CETA-eligible resources already underway (see CEIP Figure 1-3)*

Customers, advisory groups, and stakeholders shaped the CEIP

Convened and engaged Equity Advisory Group – new!

35+ CEIP-focused meetings with advisory groups, community-based organizations, and other stakeholders

1,000+ Respondents to clean electricity values and benefits community survey

350+ Comments on draft CEIP

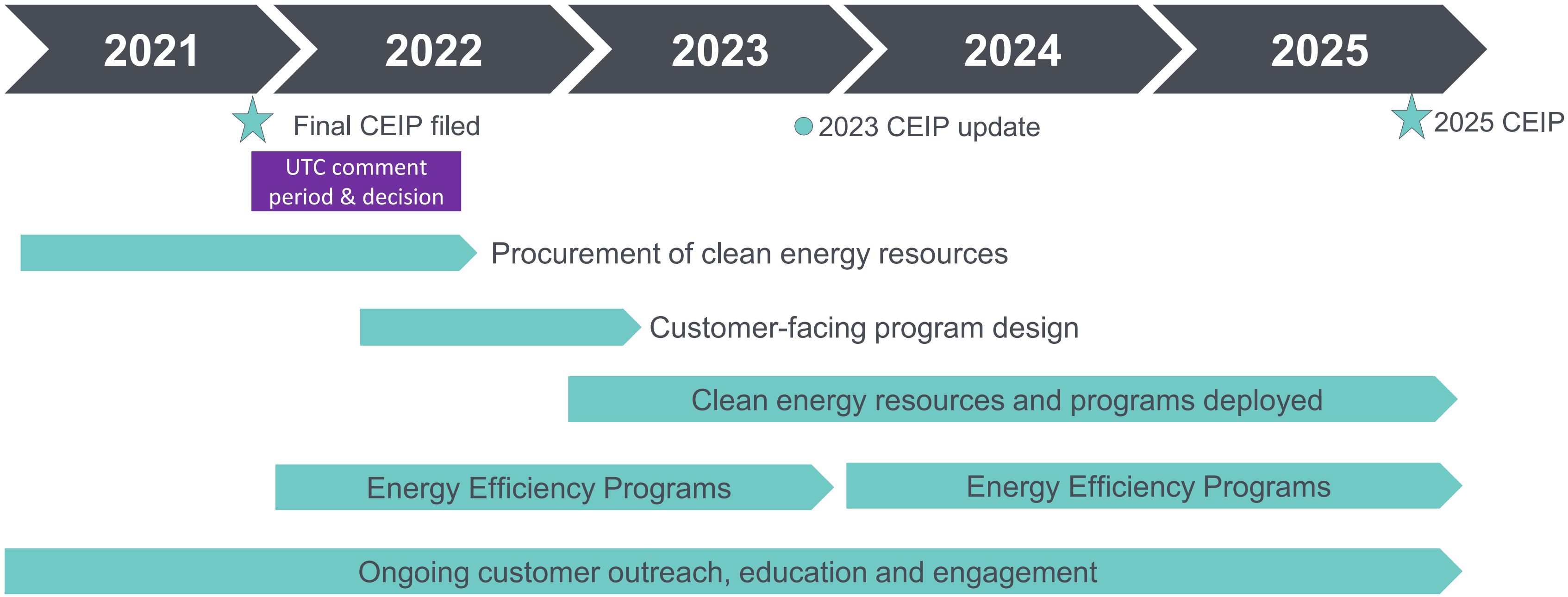
Outcomes

- Accelerated clean electricity transition
- Expanded definition of vulnerable populations
- Identified burdens, barriers and opportunities
- Development of customer benefit indicators and metrics
- Shaped specific actions and programs
- Broadened public engagement and clean energy education
- Created guiding principles for CEIP implementation

PSE's ongoing work for the 2023 biennial CEIP update

- Incorporate the analysis contained in the 2023 Electric Progress report and results of the 2021 All-Source and 2022 Targeted DER RFPs
- Develop the building blocks for an equity assessment for 2023 CEIP update:
  - Continue to develop data sources for metrics for CBIs and baseline data
  - Report on work to inform the next CEIP:
    - Potential CBIs for fish and wildlife impacts, wildfire impacts, sense of pride and self-sufficiency, and indoor air quality
    - Methodology for scoring and weighting CBIs
  - Continue to assess and measure disparities within existing programs and understand root factors causing disparities
  - Engage highly impacted communities and vulnerable populations on program design

Next steps to delivering clean electricity



UTC: Washington Utilities and Transportation Commission

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Working together for a clean electricity future

UTC comment period through March 2

- UTC will decide whether to approve, deny or modify PSE’s CEIP
- PSE’s CEIP is in UTC Docket UE-210795. To file a written comment, visit: www.utc.wa.gov/e-filing

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Email us at **ceip@pse.com**

Leave a message at **(425) 818-2051**

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2023 Electric Progress Report and Gas Utility IRP work plans

Elizabeth Hossner, Manager, Resource Planning and Analysis, PSE

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2023 Electric Progress Report

2023 Electric Progress Report

- New CETA requirement
- Provides two-year progress report on 2021 IRP
- Requires updates as outlined by WAC 480-100-625
  - Some elements of 2021 IRP
  - Updates based on new state/federal requirements and major economic/market conditions
  - Elements of the CEIP as described in WAC 480-100-640
- Results will inform 2023 CEIP Update

2023 Electric Progress Report

WAC 480-100-625 Integrated resource plan development and timing.

The utility must file a **two-year progress report**. **The utility must update:**

- Load forecast;
- Demand-side resource assessment, including a new conservation potential assessment;
- Resource costs; and
- The portfolio analysis and preferred portfolio.

The progress report must include **other updates that are necessary due to changing state or federal requirements, or significant changes to economic or market forces.**

The progress report must also **update for any elements found in the utility's current clean energy implementation plan**, as described in WAC 480-100-640.

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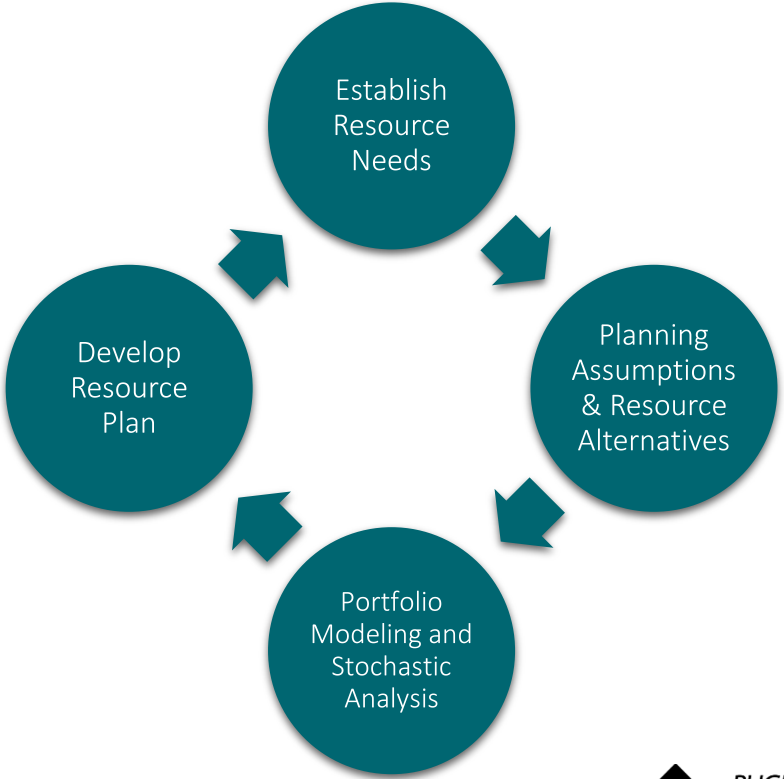
Key differences between full IRP & Electric Progress Report

2021 IRP	2023 Electric Progress Report
Inputs	
• Load forecast • Electric price and natural gas prices • Generic resource costs and assumptions • Conservation potential assessment (CPA)	**Updates to:** • Load forecast, includes climate change temperature assumptions • Electric price and natural gas prices • Generic resource costs and assumptions • CPA
Modeling	
• Electric Portfolio • Resource Adequacy • Flexibility Analysis • Stochastic analysis • Scenario / sensitivity analysis	**Updates and improvements to:** • Electric Portfolio • Resource Adequacy • Flexibility Analysis • Stochastic analysis Analyses not included: • Scenario / sensitivity
Other Updates	
• Inclusion of CETA requirements (e.g., initial CBIs, Economic, Health and Environmental Benefits Assessment)	• **Inclusion of CBIs** from 2021 CEIP • *Preliminary* Climate Commitment Act (CCA) analysis based on availability from Dept. of Ecology

2023 Electric Progress Report modeling process

The 2023 Electric Progress Report will follow a 4-step process for analysis:

1. Analyze and establish resource need
   - Energy Need
   - Capacity Need
   - Renewable Need
2. Determine planning assumptions and identify resource alternatives
3. Portfolio Modeling and Stochastic Analysis
4. Develop resource plan



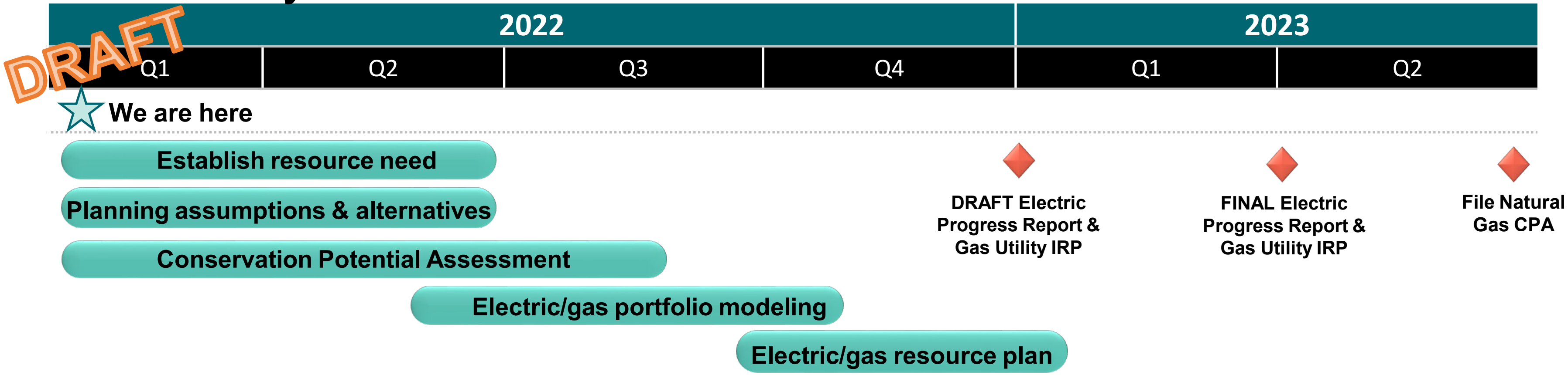
Gas Utility 2023 Integrated Resource Plan

2023

Gas Utility IRP

- Continues to be based on requirements in WAC 480-90-238
- Will be filed separately from the Electric Progress Report
- Focuses on needs of natural gas sales customers
- **New considerations:**
  - Preliminary modeling of CCA
  - Targeted electrification, inclusive of electric analysis
- **Timing:**
  - Work plan due to UTC: April 2022
  - IRP filing: April 2023

Anticipated Timeline: 2023 Electric Progress Report and Gas Utility IRP



IRP stakeholder engagement

Meeting 1

Feedback on:

- Stakeholder engagement
- CPA considerations
- Climate change temp. assumption for future analyses

Meeting 2

Updates on:

- Planning assumptions
- Resource Adequacy draft results

Feedback on:

- Resource alternatives
- Generic resource costs & assumptions
- Carbon price for CCA

Meeting 3

Updates on:

- Final resource need
- Final CPA results
- Delivery system planning

Feedback on:

- Gas resource alts
- Applying CBIs to Progress Report

Meeting 4

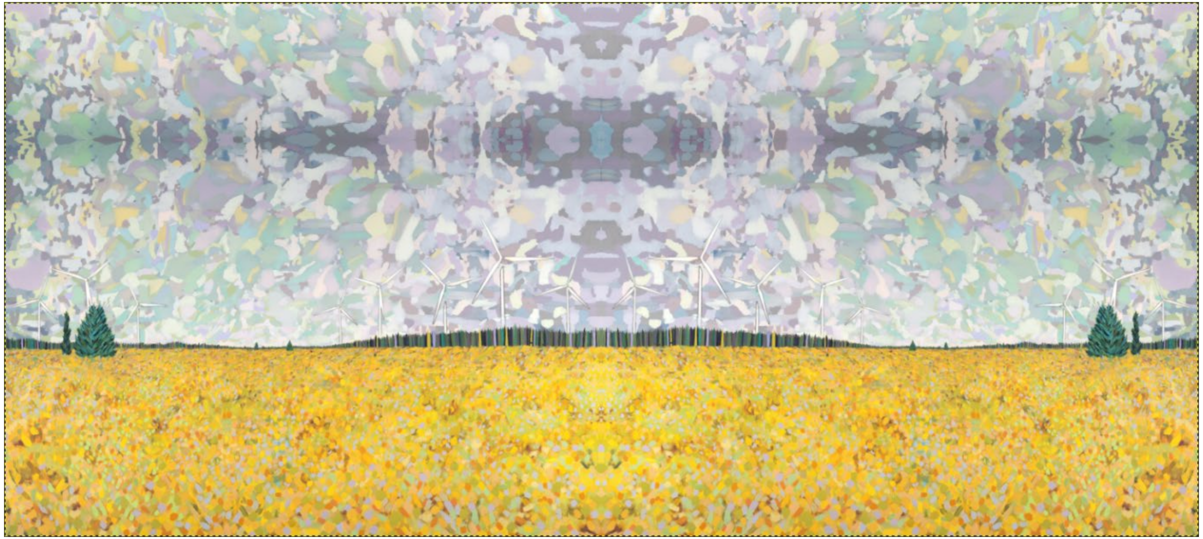
Updates and feedback on *draft* results of electric and gas portfolio

Meeting 5

Updates and feedback on *draft* Electric Progress Report and Gas Utility IRP

Break

Please return in 10 minutes



"Monet Wind" by Eric Jensen of Roslyn, WA

Base Demand Forecast: Climate Change Temperature Assumption

Load Forecasting & Analysis

Phillip Popoff, Director of Resource Planning Analytics, PSE

Allison Jacobs, Senior Economic Forecasting Analyst, Load Forecasting, PSE

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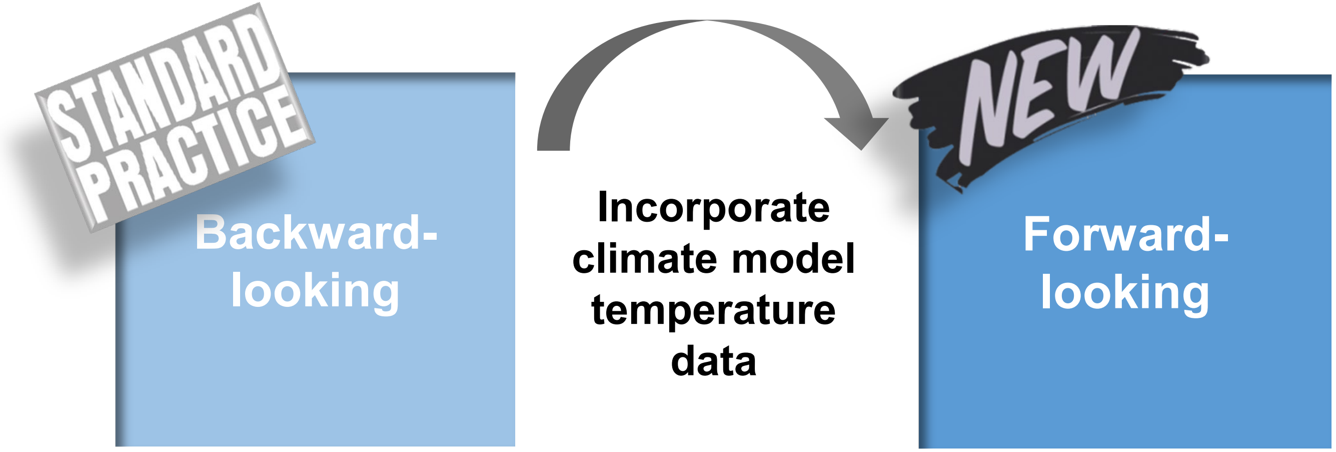
Assumptions about future temperatures are changing



Today's goal: To inform stakeholders about this building block in the planning process

How temperatures are used

Demand Forecast

Expected Customer Demand
(aka Load Forecast)

Normal demand forecast
- **Past IRPs**: Temperatures from the past 30 years
- **2023 process**: Today's discussion

Resource Adequacy Modeling

Demand Variability
- What weather might be
- How that affects demand

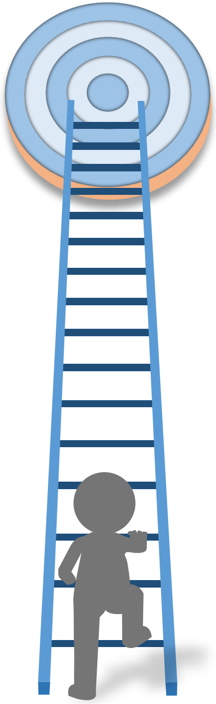
What demand could be
- **Past IRPs**: Temperatures back to 1929
- **2023 process**: Discuss in Meeting 2

This is the first step for incorporating climate change into planning

Content presented today is PSE's **first step in reflecting climate change in the demand forecast and resource plan**

We expect the methodologies and data available **will continue to evolve over time**

There are **no industry standards or best practices** for climate change assumptions



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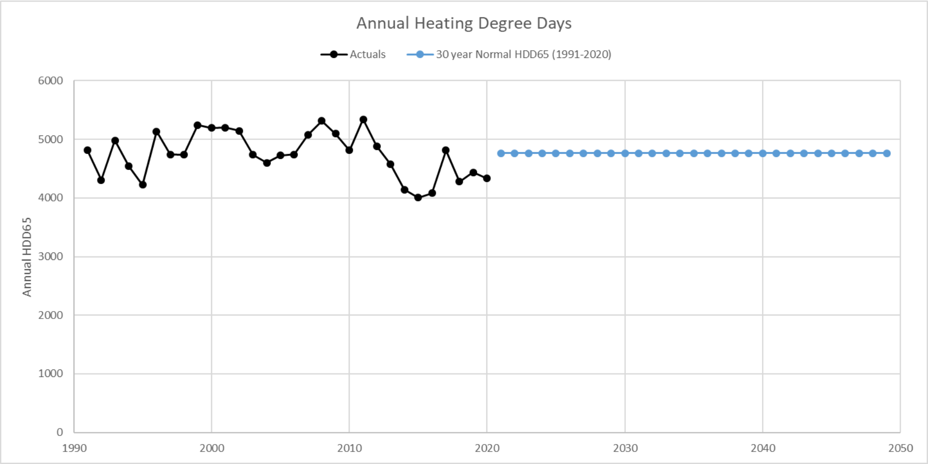
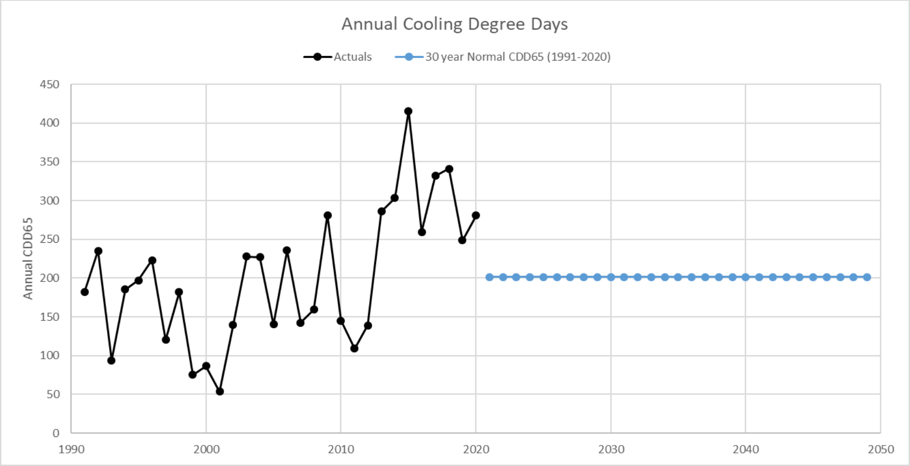
PSE's previous methods to determine normal

PSE's previous normal heating degree days and cooling degree days for load forecasting





Haven't heard of a degree day? Check out these YouTube videos for a detailed explanation:
Heating: https://www.youtube.com/watch?v=-0Sj0Fj_RL4
Cooling: https://www.youtube.com/watch?v=0IJQjW_aQ78

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PSE's previous electric peak normal temperatures ("1-in-2 chance") peak temperatures

Winter: Hourly temperature of 23°F

Summer: Hourly temperature of 93°F

These temperatures are derived by:

- Find the "1-in-2 chance" (median or 50th percentile) *hourly* temperature during heating/cooling season peak hours 8AM – 9PM
- Evaluate 30 years of historical (actual) data

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PSE's previous natural gas utility peak design temperature

Winter: Daily average temperature of 13°F

This temperature is derived by:

- Find the "1-in-50 chance" daily average temperature
- Evaluate annual coldest daily temperatures occurring between 1950-2019

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Why is electric peak normal while gas peak is extreme?

Short answer: to support planning needs…

Electric Resource Planning: Industry standards

- Resource adequacy (RA) analysis defines a buffer above normal peak
- RA analysis incorporates numerous risks: hydro conditions, wind generation, temperature driven loads, power plants failing to operating and if they break, how long it takes to fix them
- Planning reserve margin

Gas Utility Resource Planning: Industry standards

- System is physically less complicated, so there is less to go wrong
- Primary risk factor is temperature impacts to loads
- Planning standards focused on “design” or extreme weather conditions

Climate models selected by the Northwest Power and Conservation Council

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Climate change models for the region have been developed

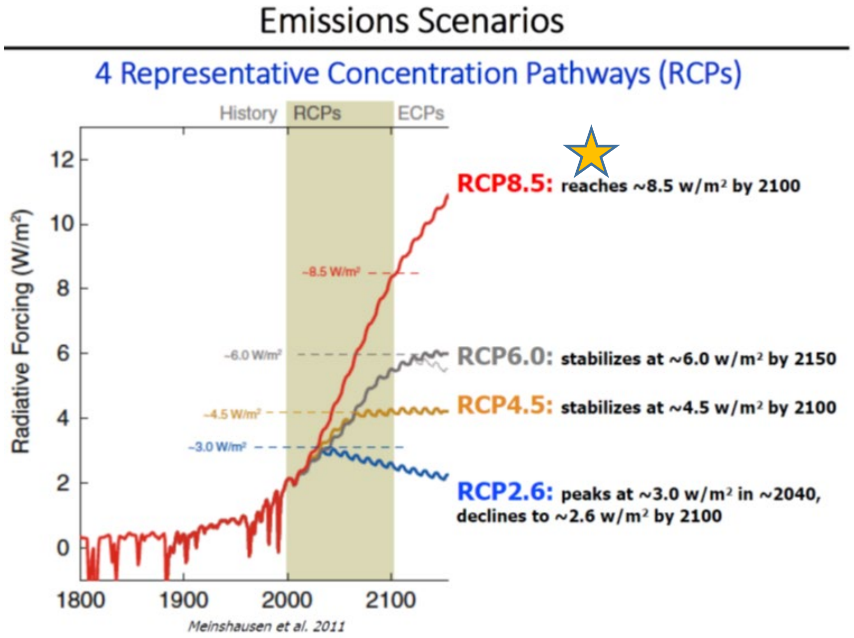
- A **coalition including climate scientists**, Bonneville Power Administration, US Army Corps of Engineers, and Bureau of Reclamation created climate models for the region

  www.nwcouncil.org/2021powerplan_summary-climate-change-scenarios

- The Northwest Power and Conservation Council's draft 8th Power Plan was issued in September 2021

  www.nwcouncil.org/2021-northwest-power-plan

- The Council uses temperature projections downscaled for the region from three different Global Circulation Models



Climate change models selected by the Council for use in 8th power plan

CanESM2

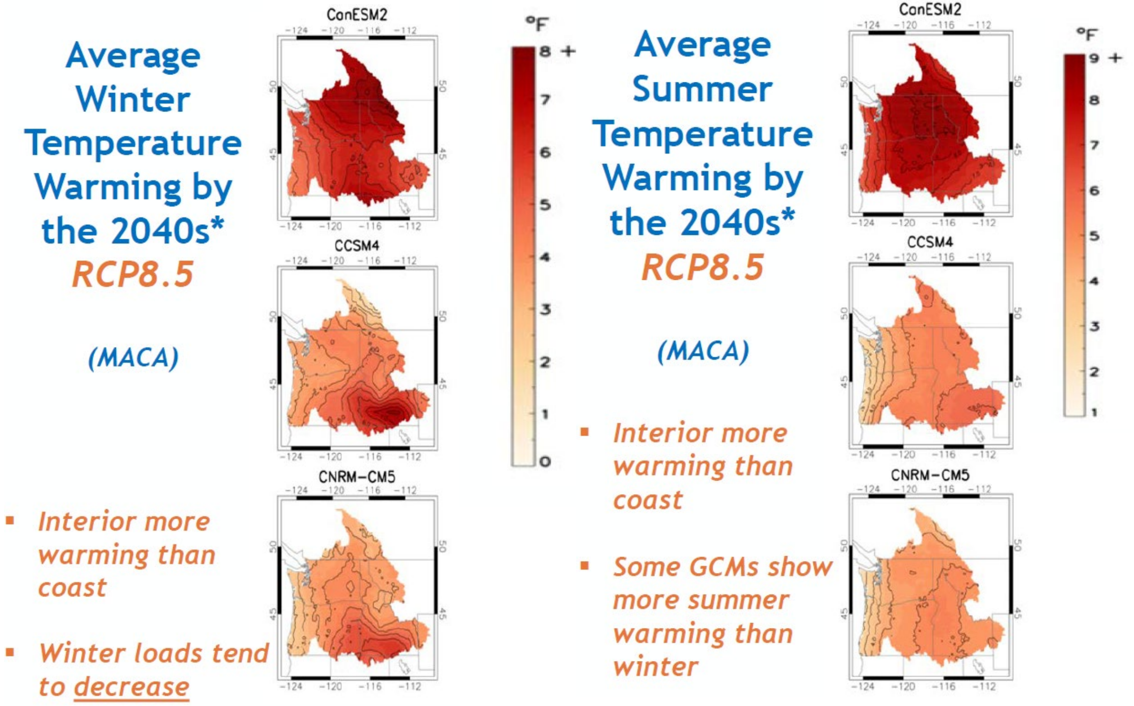
- Warm in winter
- Hot in summer

CCSM4

- High hydro in winter
- Low hydro in summer

CNRM

- Less overall warming in winter and summer
- Low hydro in winter
- High hydro in summer



Task 1: Develop an Updated Energy Normal

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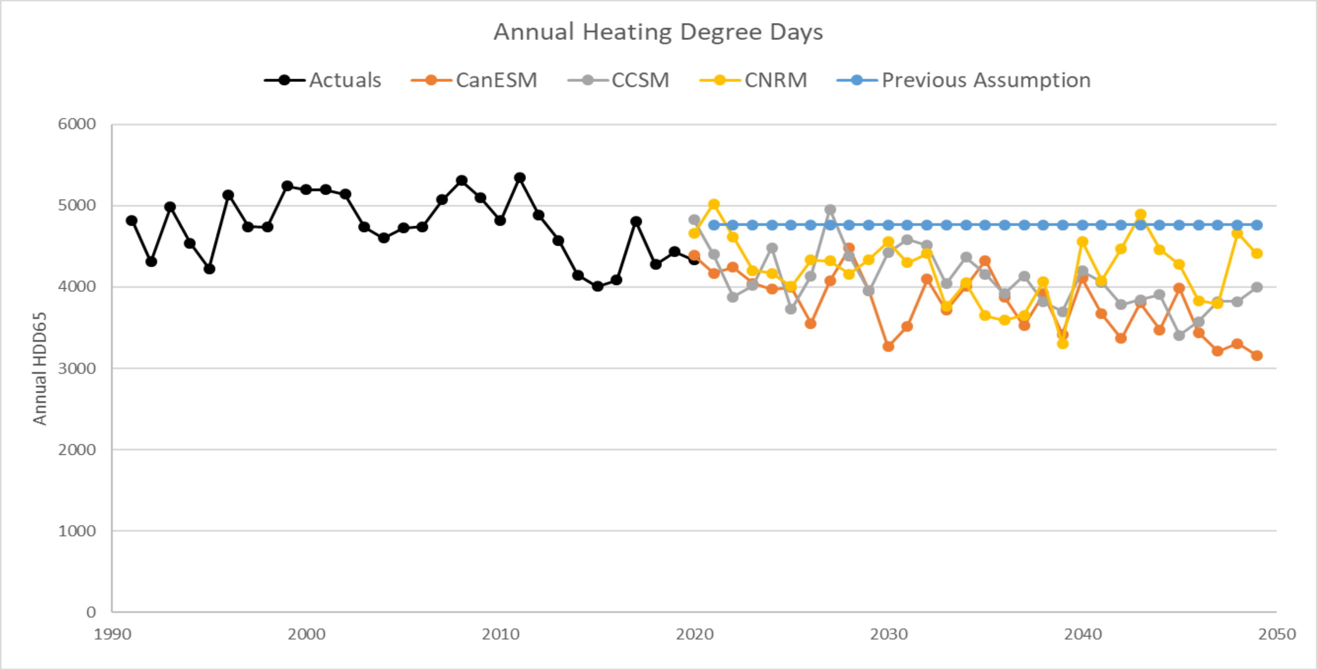
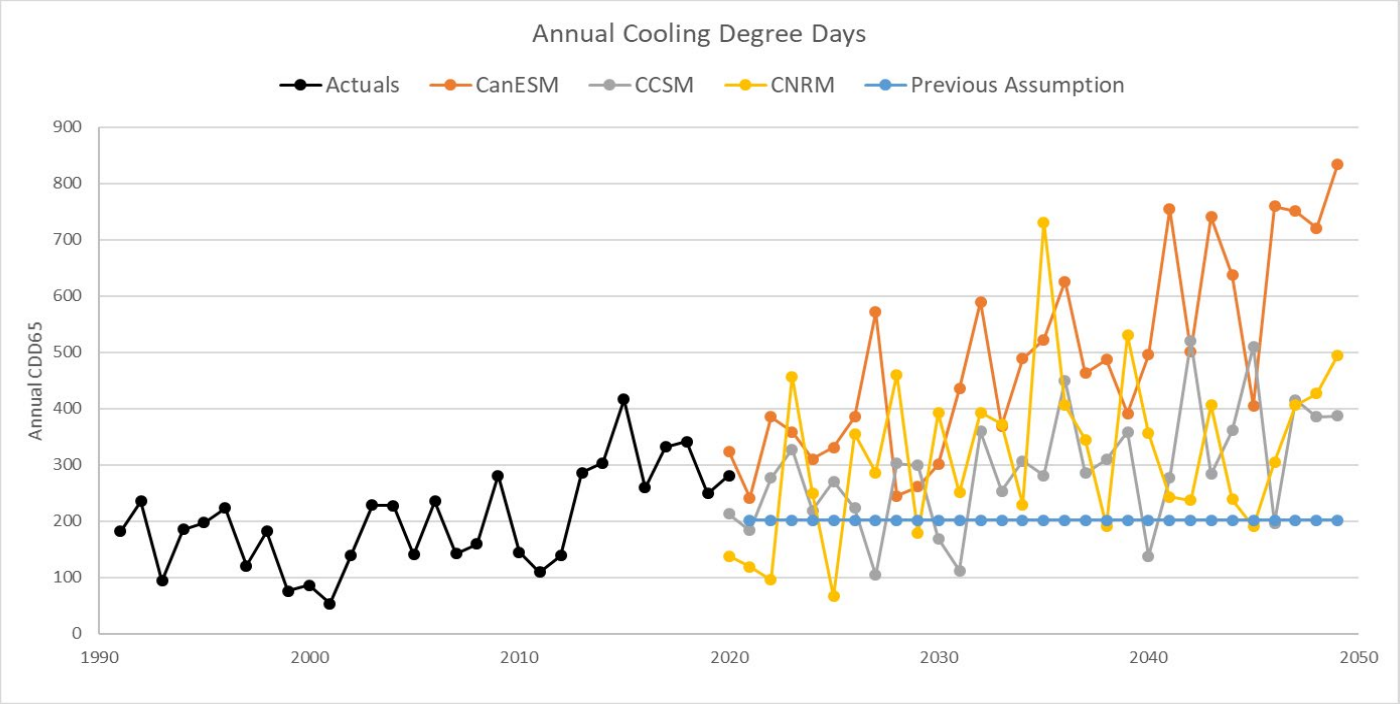
To explore the data, we calculated heating degree days from the climate model temperatures

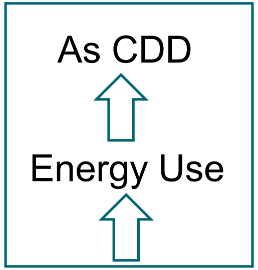


As HDD

Energy Use

We calculated cooling degree days from the climate model temperatures





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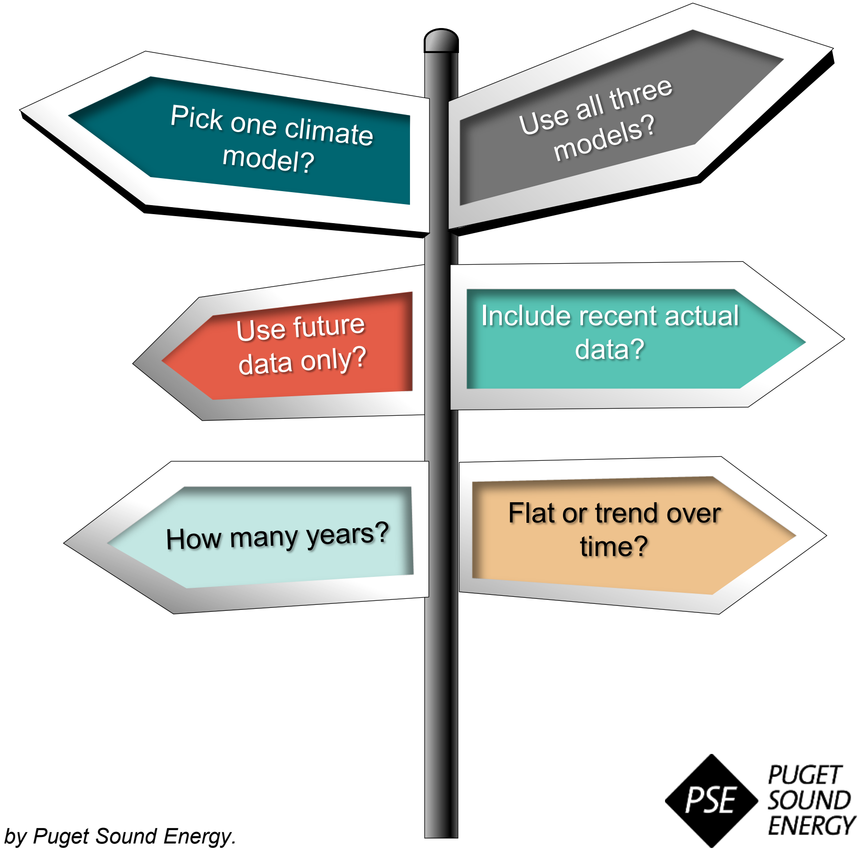
How do we use the climate model data to develop new assumptions for our energy models?

Our goals:

1. Incorporate future temperature data into assumptions for the base demand forecast
2. Develop a new normal calculation that is objective
3. Provide the information in a framework necessary for planning



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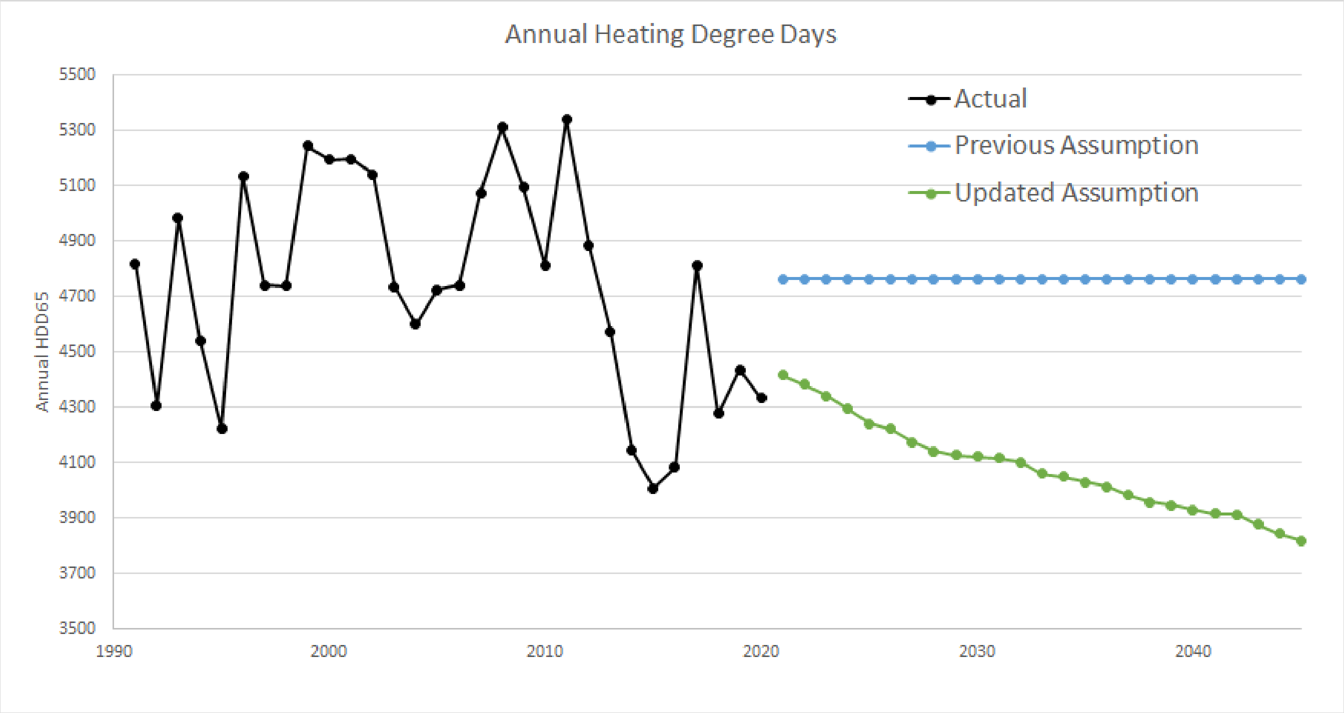
Considerations we asked ourselves to shape our approach

Use one of the models, or use a combination of all three?	Incorporate history, future, or a combination in normal calculation?	How many years of data to include in calculation?	Should the normal degree days remain flat or reflect a trend in the forecast?
We plan to use all three models in our approach	***We plan to include some amount of recent actual data to provide a linkage from observed actual to modeled data streams***	***We plan to base the new normal calculation on 30 years of data (15 years of historical data + 15 years of climate model data)***	***We plan to calculate normal degree days that reflect overall warming over time***

For electric and gas energy models, we plan to use a 30-year normal HDD, centered on the year of interest, rolling forward over time



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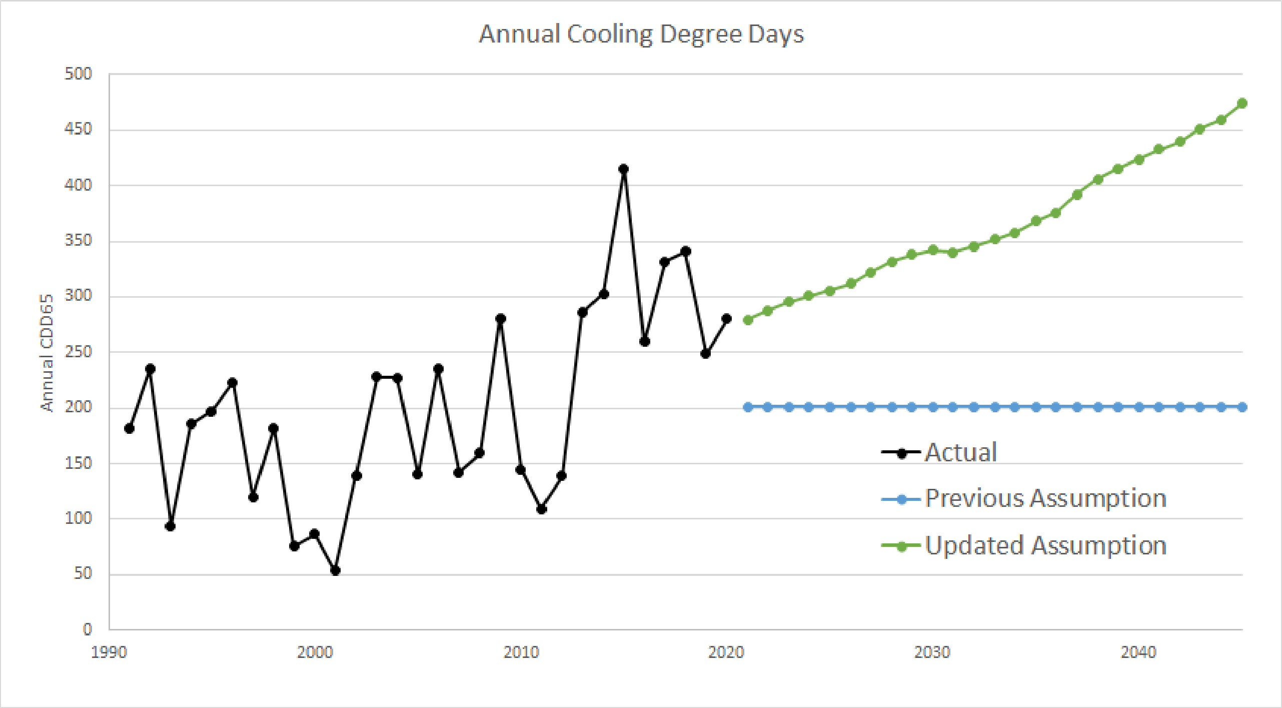
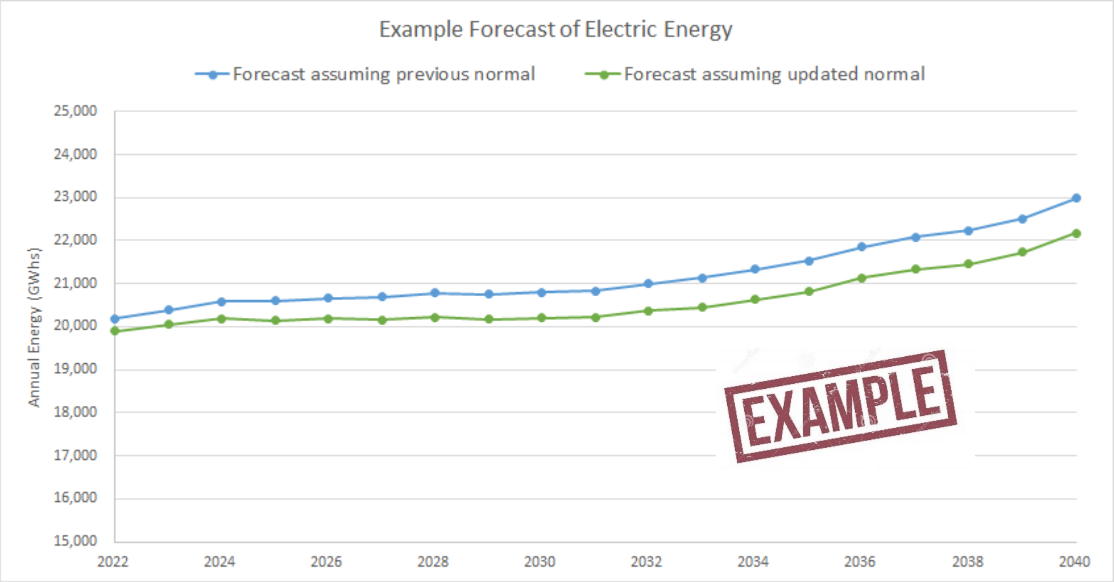
For electric energy models, we plan to use a 30-year normal CDD, centered on the year of interest, rolling forward over time



Example impacts to electric energy demand forecast using updated normal assumption



- **Results are for illustrative purposes only** to show impacts of changing *only* the temperature assumptions on energy forecast after Demand Side Resources are included
- **These are not results of the updated forecast** that will be used in the Electric 2023 IRP Progress Report
- **Further updates, including an EV update, will be made to the forecast before it is used in the 2023 Electric Progress Report**

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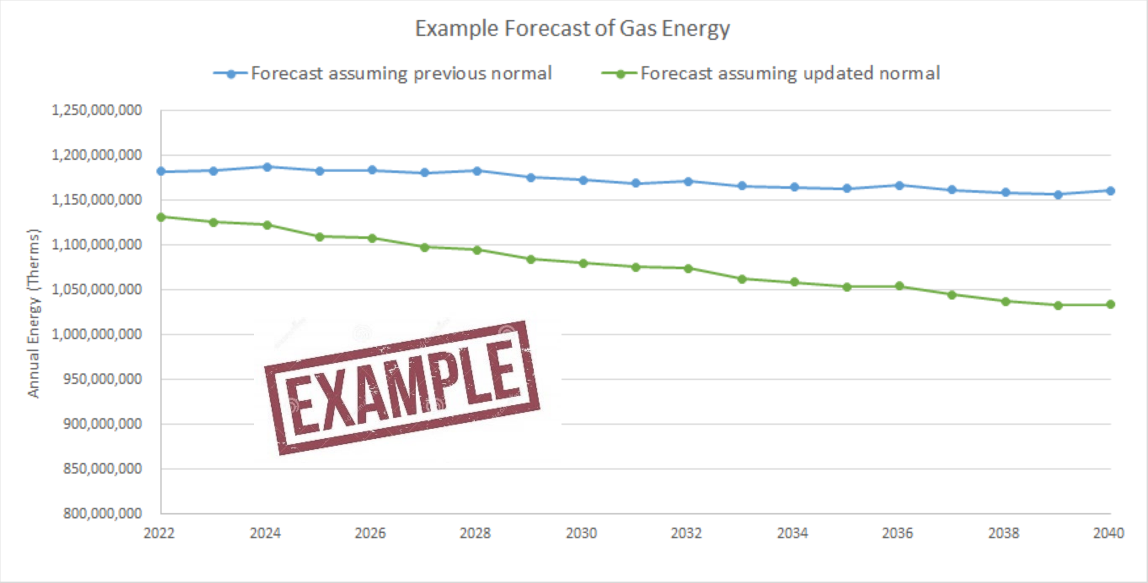
Example impacts to natural gas utility energy demand forecast using updated normal assumption



- **Results are for illustrative purposes only** to show impacts of changing *only* the temperature assumptions on energy forecast after Demand Side Resources are included
- **These are not results of the updated forecast** that will be used in the 2023 Gas Utility IRP
- **Further updates will be made to the forecast before it is used in the 2023 Gas Utility IRP**

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Task 2a:
Develop an Updated Normal Peak Temperature - Electric

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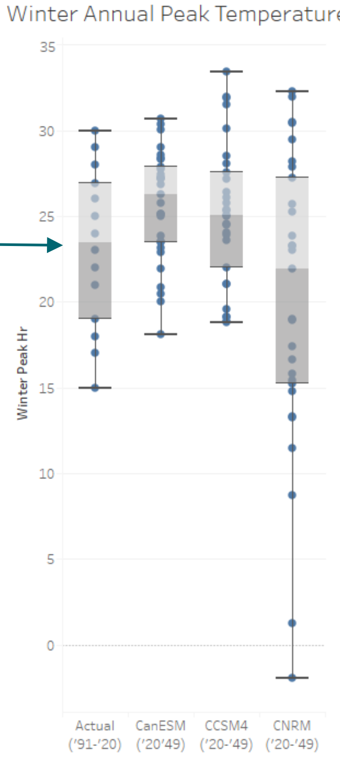
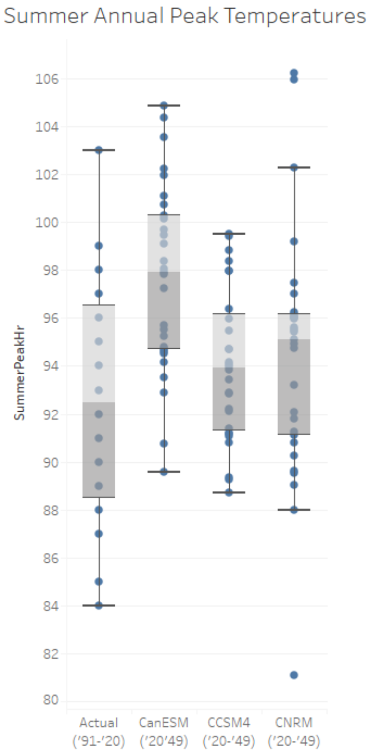
To explore the climate model temperature data during peak hours, we look at the medians and the extremes

Where the light gray box meets the dark gray box is the median ("1-in-2 chance")





The "whiskers" illustrate the extreme values and variability

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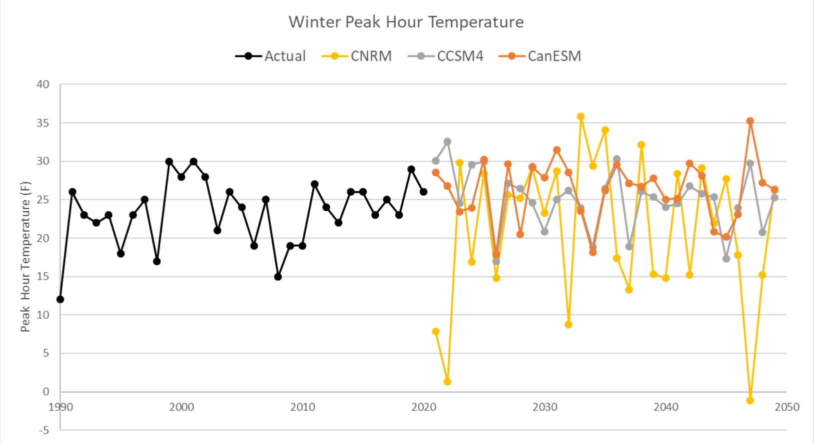
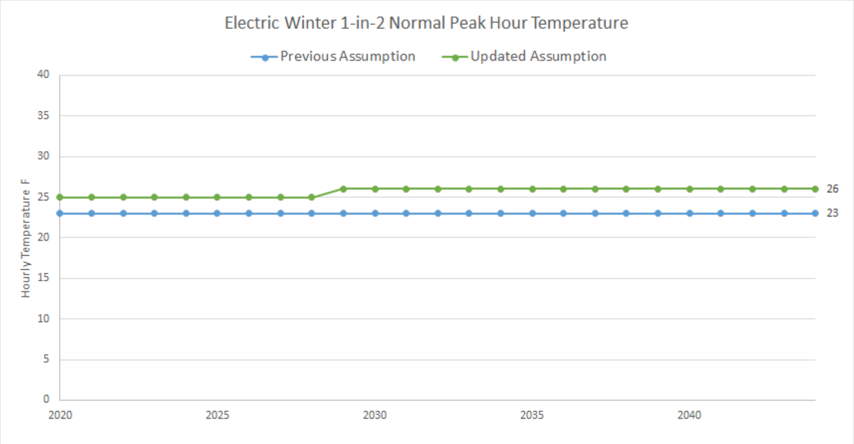
Electric Peak Hour Temperature in Winter increases

- The same considerations and approaches apply to determine updated normal peak temperatures
- For electric normal peak, we are planning to use a 30-year centered rolling time period to determine "1-in-2 chance" peak temperatures

Actual and Climate Model Temperature Data



Assumption Derived from Data



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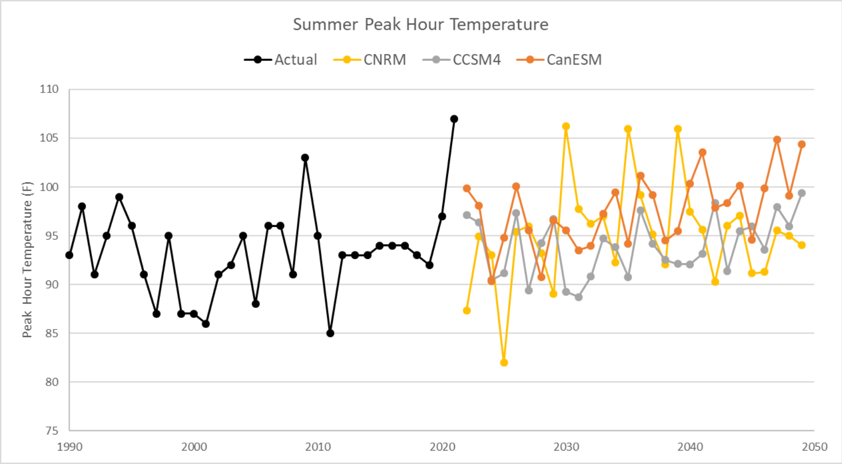
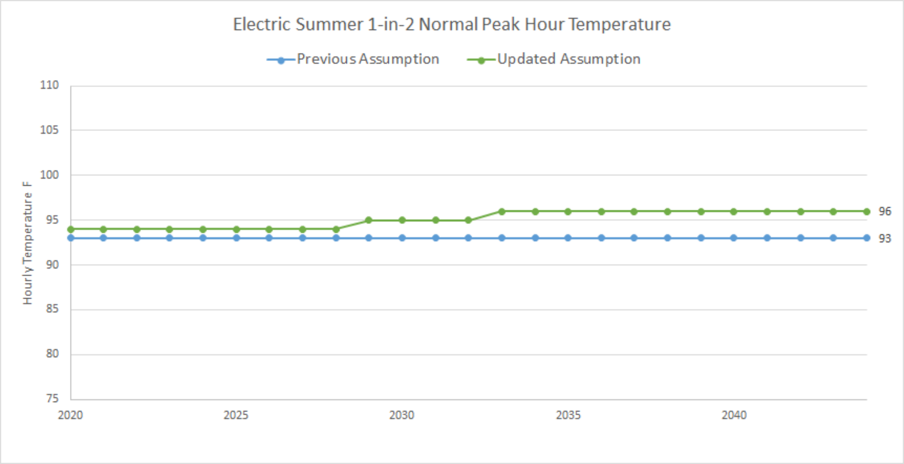
Electric Peak Hour Temperature in Summer increases

Actual and Climate Model Temperature Data

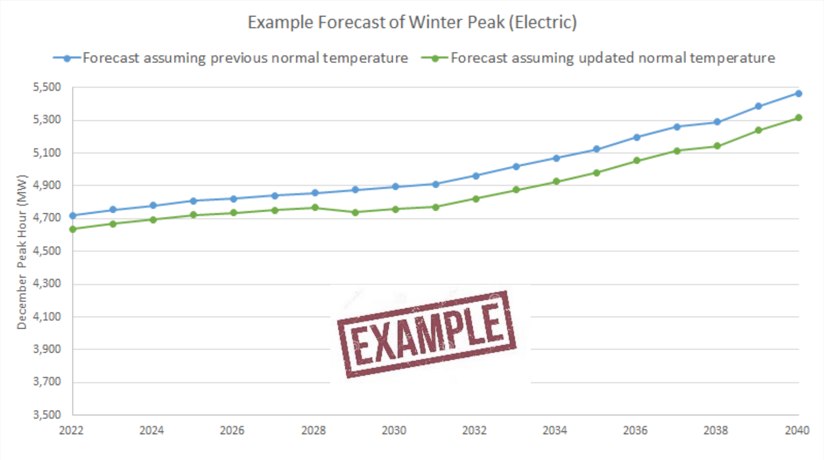


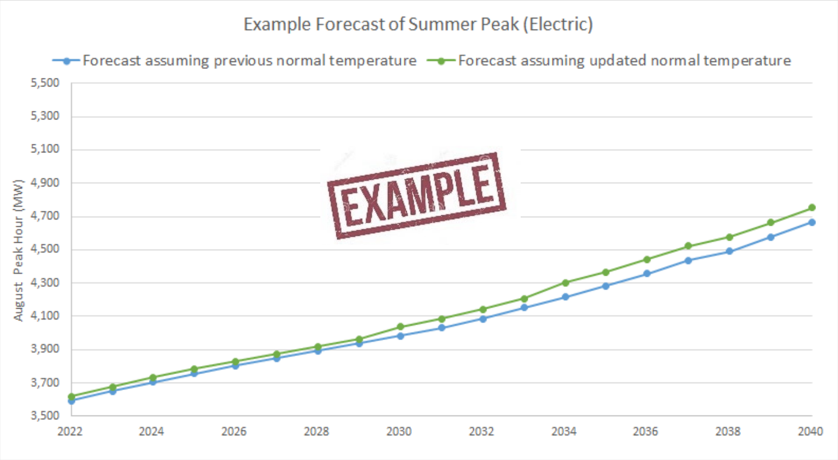
Assumption Derived from Data



Example impacts to electric peak demand forecast using updated normal temperature assumption

- Results are for illustrative purposes only to show impacts of changing *only* the temperature assumptions on peak forecast after Demand Side Resources
- These are not results of the updated forecast that will be used in the 2023 Electric Progress Report





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Task 2b:
Create an Updated Peak Design Temperature – Gas Utility

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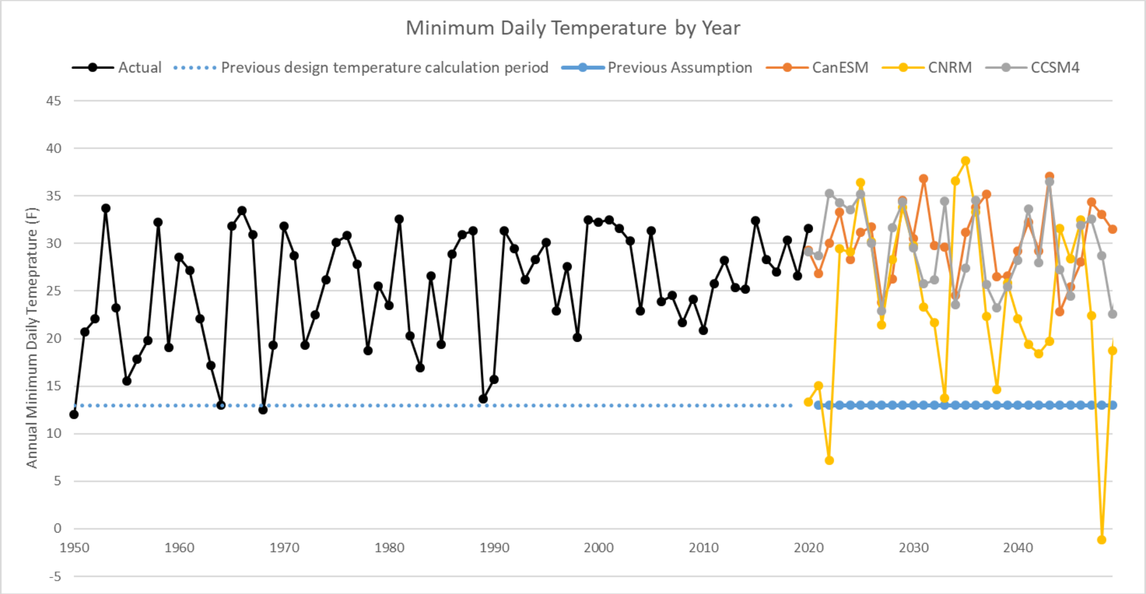
Need to determine new design peak day temperature assumption for natural gas utility peak model

- The design temperature for natural gas utility peak is based on more extreme temperatures
- Previous: "1-in-50 chance" annual coldest daily temperatures occurring between 1950-2019: 13 F/day



Using Data from all 3 models		
Dates used	# of Obs.	1-in-50 Daily Temp (F)
1950-2019	79	13
2010-2049	98	

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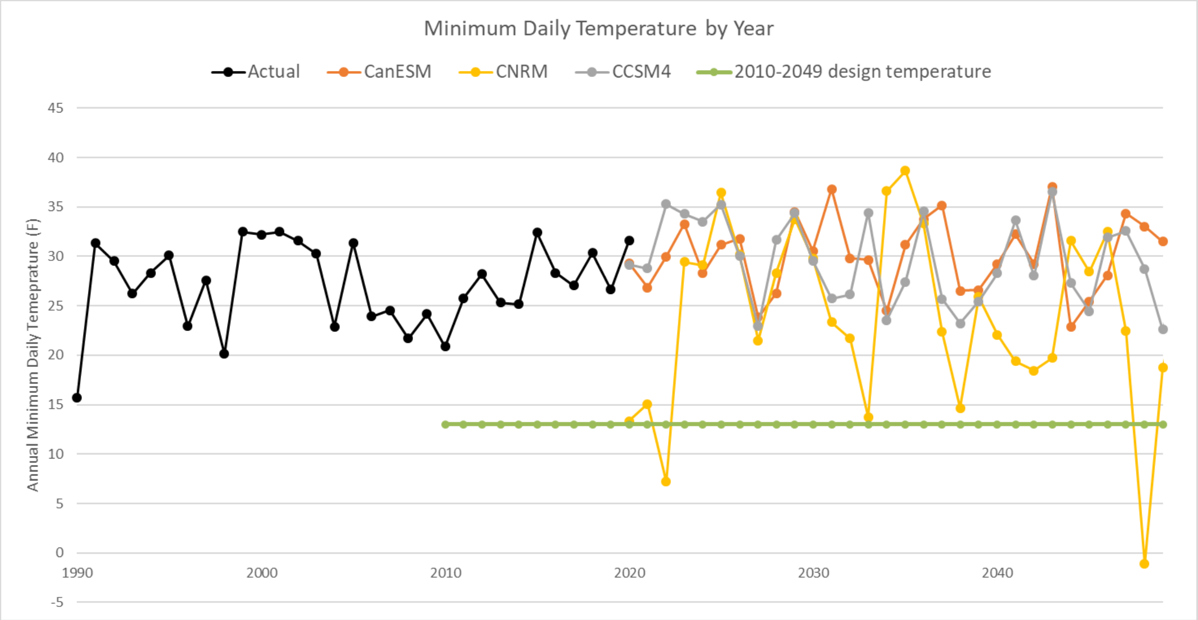
For gas utility design peak day, we are planning to use a combination of historical and modelled temperatures to determine design temperature

"1-in-50 chance" daily temperatures occurring from 2010-2049: 13 F/day (flat)



Using Data from all 3 models		
Dates used	# of Obs.	1-in-50 Daily Temp (F)
1950-2019	79	13
2010-2049	98	13

Using this methodology, the updated gas design day peak temperature is the same as the previous (13F).

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We are seeking feedback on energy and peak temperature methodology for the base demand forecast

- This approach will be used in this IRP as our first step of incorporating climate change into the demand forecast
- We are interested in thoughts, ideas, and feedback as this methodology will evolve as we learn more about available data and developing industry practices

Model	Measurement	Calculation	Based on Time Period
Energy - Electric and Natural Gas	Degree Days	Average	15 years actual + 15 years forward
Peak – Electric Winter	Hourly Temperature	Median (1-in-2 chance)	15 years actual + 15 years forward
Peak – Electric Summer	Hourly Temperature	Median (1-in-2 chance)	15 years actual + 15 years forward
Peak – Natural Gas Utility	Daily Temperature	1-in-50 chance	2010 - 2049

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Conservation Potential Assessment (CPA)

Gurvinder Singh, Consulting Resource Planning Analyst, Resource Planning and Analysis, PSE

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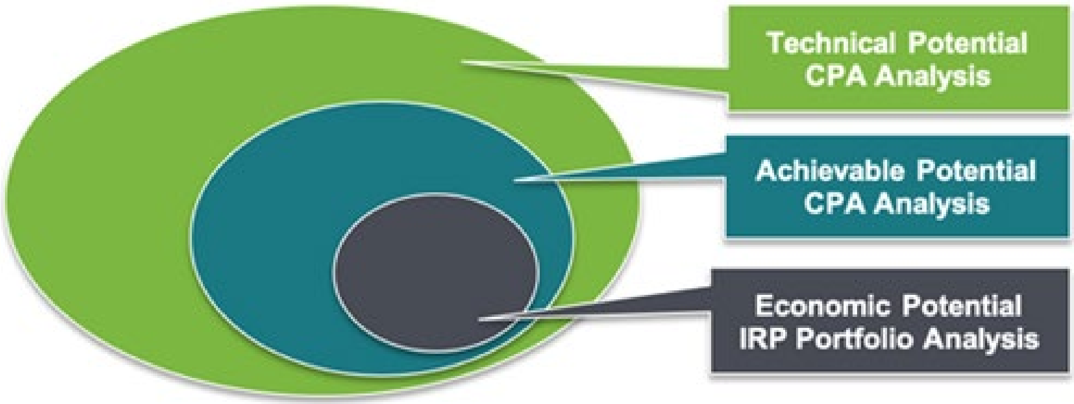
CPA Overview

- Identify achievable **technical potential** of possible **energy efficient technologies** and measures in the utility's service territory
- Demand Side Resources included in the CPA - Energy efficiency, demand response, distribution efficiency, combined heat & power, distributed solar & codes and standards



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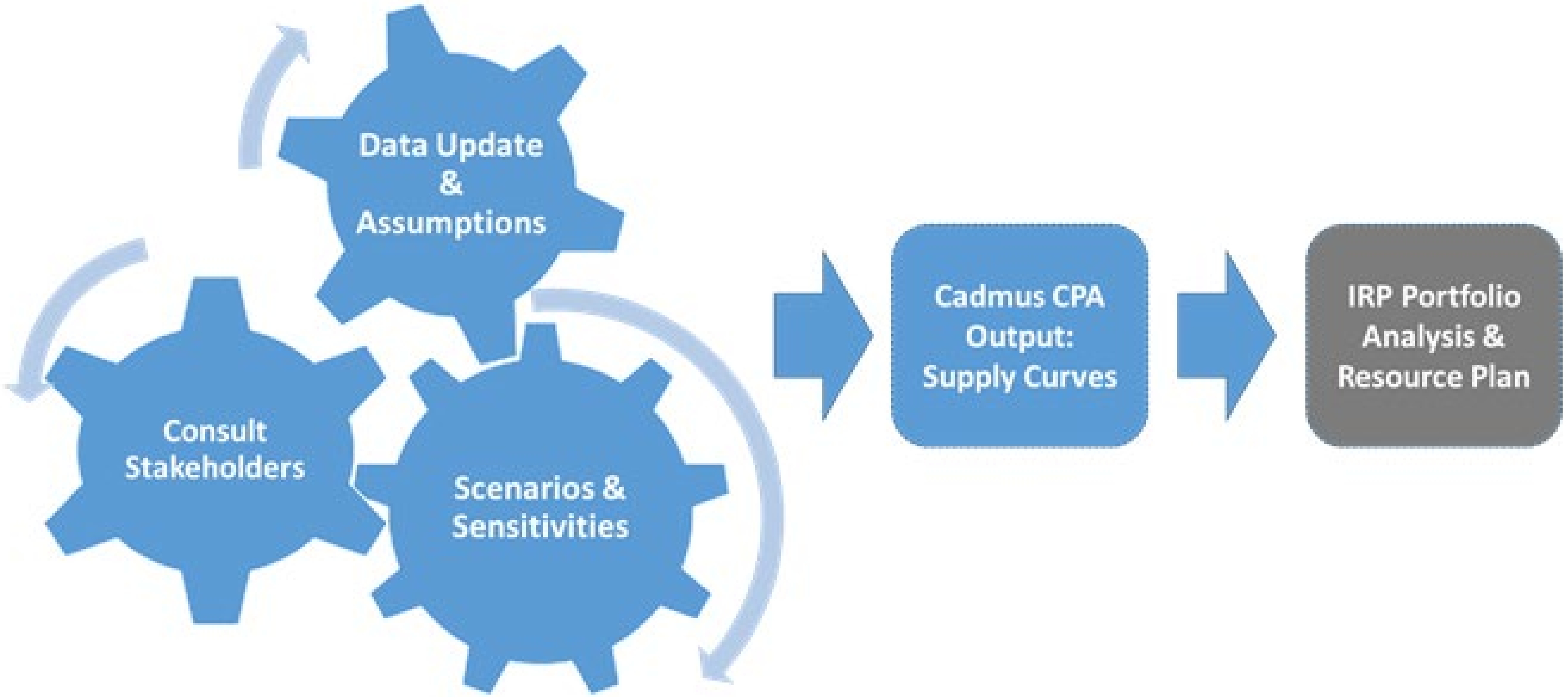
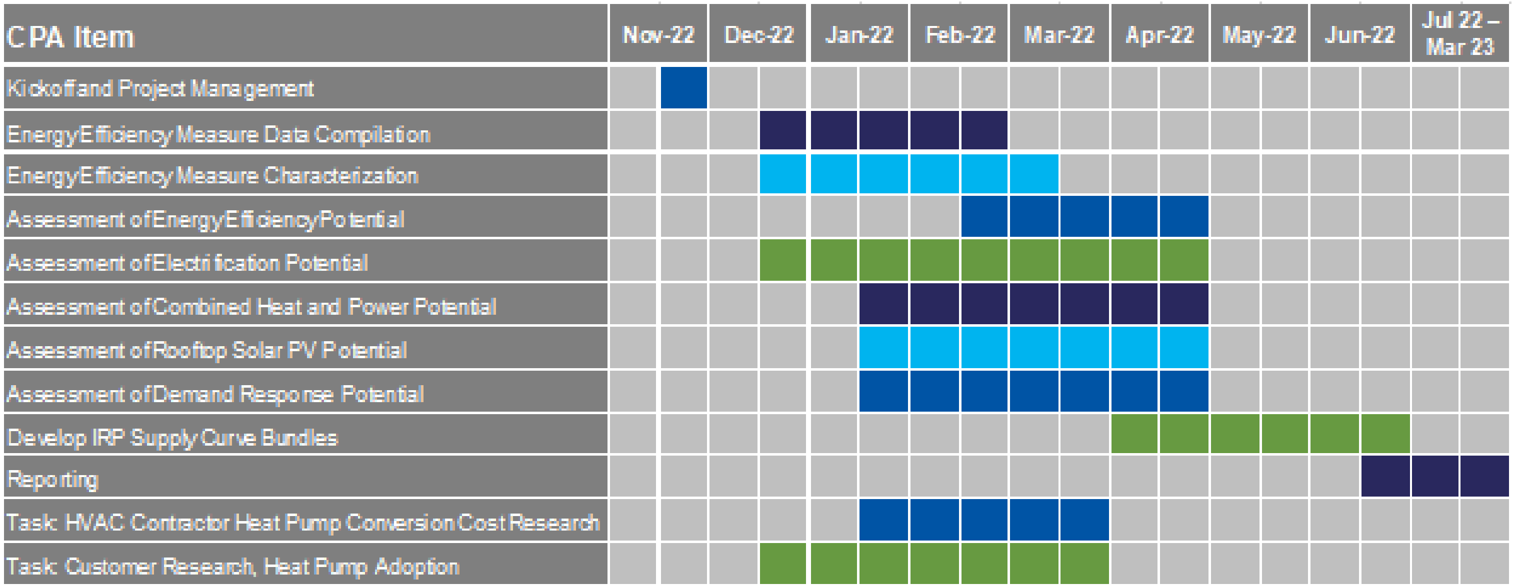
Process overview



CPA includes a variety of considerations

Demand Response	Energy Efficiency Electric & Natural Gas	Locational Analysis
Rooftop Solar PV	Scenarios & Sensitivities	Combined Heat & Power
Climate Change	Gas to Electric Measures	Named Communities & Equity

CPA timeline



REPORTING

Separate gas and electric reports

Draft reports **August '22**

Final reports **December '22**

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Small Group Discussions

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Small group discussions

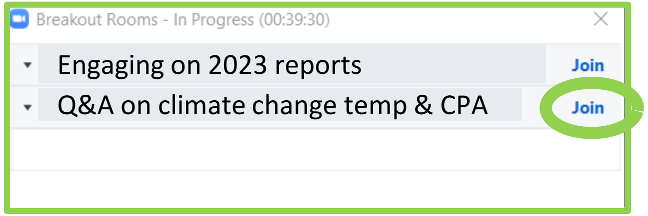
We will move into our small group discussions. Participants have the opportunity to join two thematic rooms (25 minutes). Participants will return to hear key takeaways from small group discussions

Room 1: Engaging on the 2023 reports	***Room 2: Conservation Potential Assessment and Climate Change Temperature Assumption***
What topics are important to IRP stakeholders when it comes to providing input on the 2023 reports (2023 Electric Progress Report and 2023 Gas Utility IRP)? What recommendations do IRP stakeholders have when it comes to topics for future meetings?	CPA: • What questions do IRP stakeholders have about the CPA and the process to develop it (i.e. data, assumptions, and scenarios)? • Reflecting on past CPAs, are there topics you'd like to PSE to consider? Climate change temperature assumption: • Any specific questions about the climate change temperature assumption? • What other considerations should PSE reflect on for future analyses?

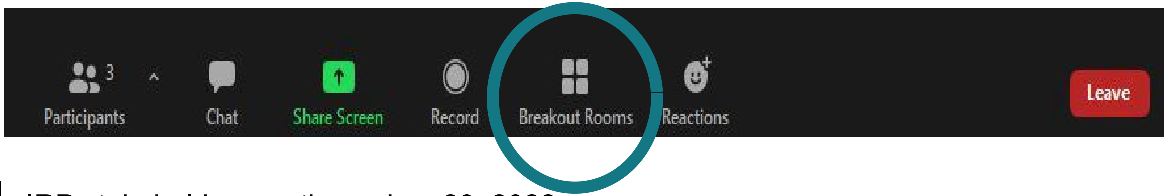
Breakout room Zoom tips

Step 1: Click the **'Breakout Rooms' icon** at the bottom of your screen

Step 2: Click **'Join' to choose** your Breakout room



***Repeat Steps 1 and 2** to jump from one Breakout Room to another



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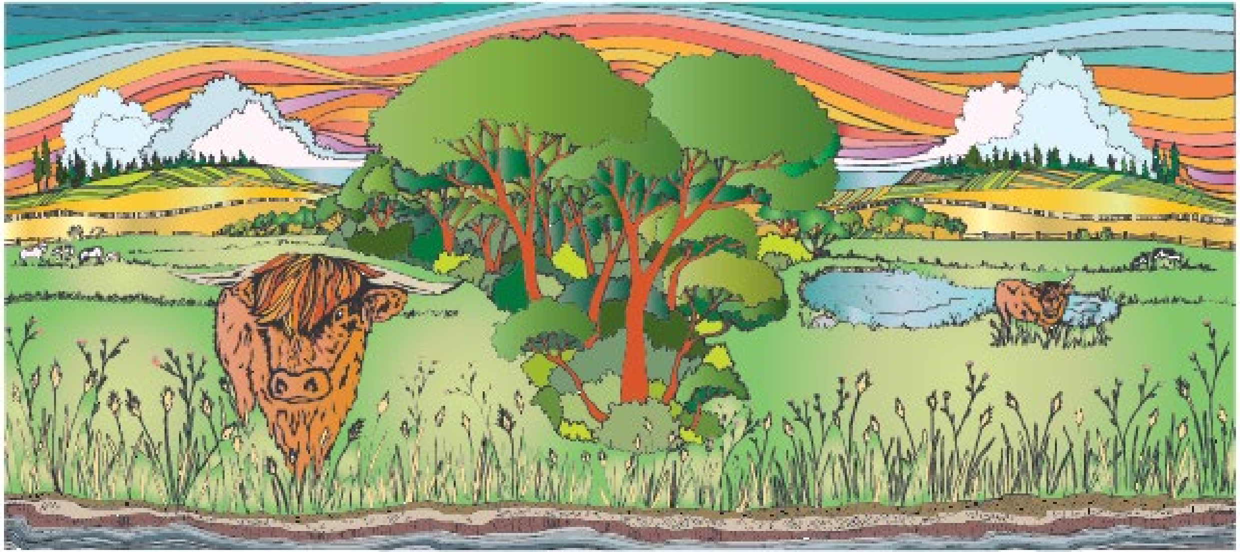
Report outs

Each group will report out (~3 minutes each)



"Farmscape" by Tia Savedo of Whidbey Island, WA

IRP stakeholder feedback process

Feedback form: pse-irp.participate.online/feedback-form

Jan. 24	A recording of the webinar and the transcript of the chat will be posted to the IRP website so those who were unable to attend can review
Jan. 27	Feedback forms are due. Feedback should focus on: • Plans for 2023 Electric Progress Report and 2023 Gas Utility IRP • Climate change temperature assumption (future considerations) • Conservation Potential Assessment considerations
Feb. 25	A feedback report of comments collected from the feedback form, along with PSE's responses, and a meeting summary will be shared with stakeholders and posted to **pse.com/irp**

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Next steps and stay in touch

Next meetings with IRP stakeholders

- We'll review feedback from this meeting to shape our stakeholder engagement strategy
- Stay tuned for updates on meeting dates!

Stay in touch

IRP@pse.com

pse.com/irp

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Appendix

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Common acronyms

Acronym	Meaning
BCP	Biannual Conservation Program
CBI	Customer benefit indicator
CCA	Climate Commitment Act
CDD	Cooling Degree Day
CEAP	Clean Energy Action Plan – 10-year strategy
CEIP	Clean Energy Implementation Plan – 4-year roadmap
CETA	Clean Energy Transformation Act, which set clean electricity standards for Washington
CPA	Conservation Potential Assessment
DER	Distributed energy resource, e.g., rooftop solar & small-scale battery storage
DR	Demand response, e.g., incentive programs for customers to reduce their energy use at peak periods
HDD	Heating Degree Day
HIC	Highly Impacted Communities
IRP	Integrated Resource Plan – 20 year resource plan
Named Communities	Refers to “Highly Impacted Community” and “Vulnerable Populations” (defined by CETA)
PPA	Power purchase agreement
RA	Resource Adequacy
RFP	Request for proposal
UTC	Washington Utilities and Transportation Commission, which regulates PSE
VP	Vulnerable Populations
WAC	Washington Administration Code