Northwest **Power** and **Conservation** Council

October 6, 2020

MEMORANDUM

TO: **Council Members**

FROM: **Tina Jayaweera, Jennifer Light, Kevin Smit**

SUBJECT: **Stakeholder Comment on Energy Efficiency Target Framework**

BACKGROUND:

Presenter: Multiple Stakeholders

Summary: In preparation for the 2021 Power Plan, staff has begun engaging stakeholders on how the energy efficiency target may be framed, both at the regional level as well as for Bonneville. The topic was discussed at the April and September Conservation Resources Advisory Committee (CRAC) meetings as well as the August Power Committee meeting. At these meetings, staff highlighted a variety of considerations for Council members to weigh when setting these goals. Some areas of consideration for both the regional and BPA targets include:

1. Structure of the target
    a. Should it be a point target or a range?
    b. Should the target include intermediary milestones (e.g. annual or bi-annual) in addition to the action plan and 20-year goals?
2. How specific should the target be?
    a. Should it include a megawatt goal?
    b. Should it include specific end use or program goals or by acquisition mechanism?
3. How to ensure support for non-program efforts?
    a. Northwest Energy Efficiency Alliance
    b. Regional market research

At this point, this discussion is just focused on the framework for the target rather than the size (aMW) of the target; the final target will only be determined after the resource analysis is complete. Part of the goal to begin this discussion is to ensure that there is a region-wide understanding and clarity about expectations around energy efficiency acquisition.

Some stakeholders expressed interest in sharing their view on this framework directly with Council members in addition to their contributions (both verbal and in writing) at the CRAC meetings. The list of stakeholders presenting is still being finalized and will be made available prior to the Power Committee meeting.

Relevance: Conservation is a priority resource and the framing of the target will be important to assure regional efficiency acquisition is consistent with this target and this resource is available to meet the region's long-term power needs.

Background: The Council has broad discretion in how the energy efficiency target is framed. For example, in prior plans, the Bonneville target for energy efficiency has ranged from quite specific (e.g. Bonneville shall acquire 5 aMW from heat pump water heaters) to quite broad (e.g. Bonneville should continue to meet its share of the regional conservation goals). These framework discussions have been focused on laying out the various options.

More Info: The draft framework was presented to the Power Committee at its August 2020 meeting and discussed further at the Conservation Resources Advisory Committee at its September 30, 2020 meeting. A number of stakeholders provided written comments prior to the CRAC meeting; these are posted on the CRAC Sept 30 meeting page.

2021 Power Plan and Energy Efficiency

Michael Deen, Public Power Council

Megan Stratman, Northwest Requirements Utilities

PPC is the umbrella trade association representing BPA's preference customers of all sizes and business models across the Northwest

Variety of loads, including metropolitan areas and small rural utilities, high and low load growth.

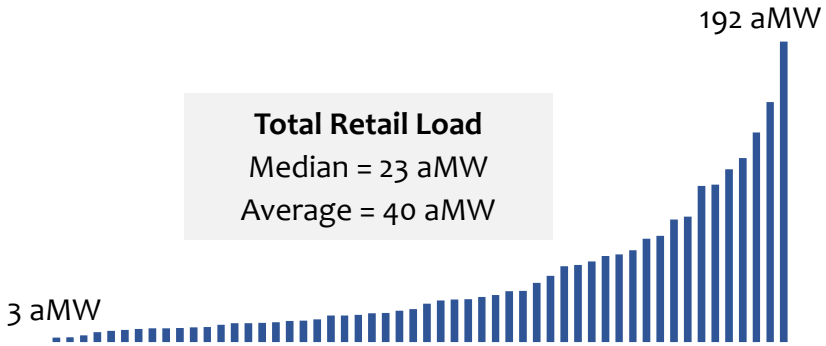
PPC's 87 active members purchase **90%** of BPA's Tier 1 power

NRU represents the interests of **54** utility members that are located across 7 states and hold Load Following, NT contracts.

Mostly small, rural and residential loads.

NRU members purchase **28%** of BPA's Tier 1 power, which is about **~$578M/year** in annual revenues to BPA.

Combined, NRU members' Total Retail Load exceeds **2,150 aMW**.



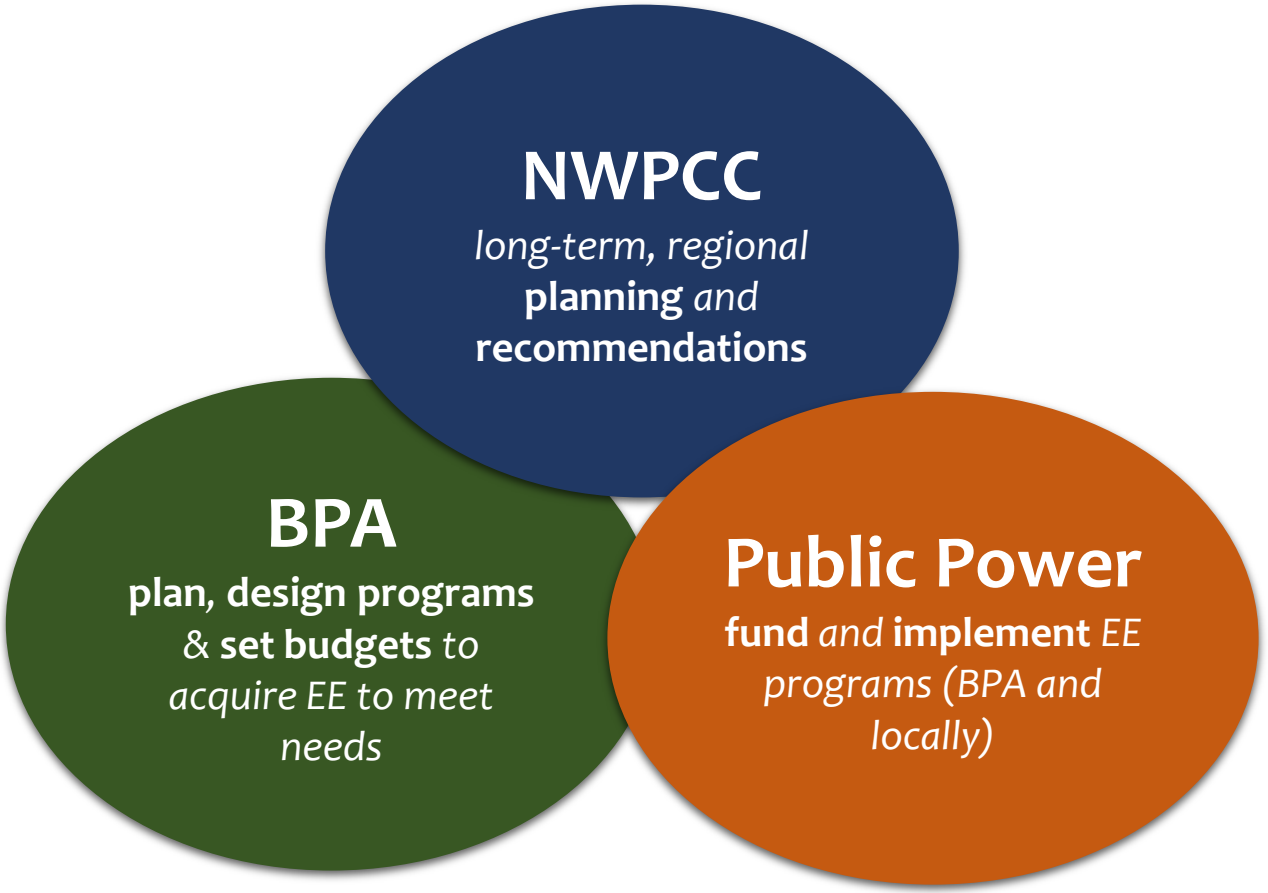
The NWPCC's Power Plans are Important to Public Power

- Provides planning information on regional loads and resources, including EE supply curves, that can be used by BPA and utilities to inform their resource planning strategies, including EE acquisition.
- As the sole funders of the NWPCC, public power invests over $11M/year in NWPCC work products.
- 2021 Power Plan will cost public power rate payers $20+ million

Energy Efficiency Is Important to Public Power

- Public power invests more than $100M/year in acquiring energy efficiency, working with BPA and at the local utility level.
- Energy efficiency helps keep our power supply green and low cost and helps local consumers.
- Load and resource planning is inherently uncertain. We need to be flexible in when and how we acquire resources, including energy efficiency.

Regional Roles in Acquiring Energy Efficiency

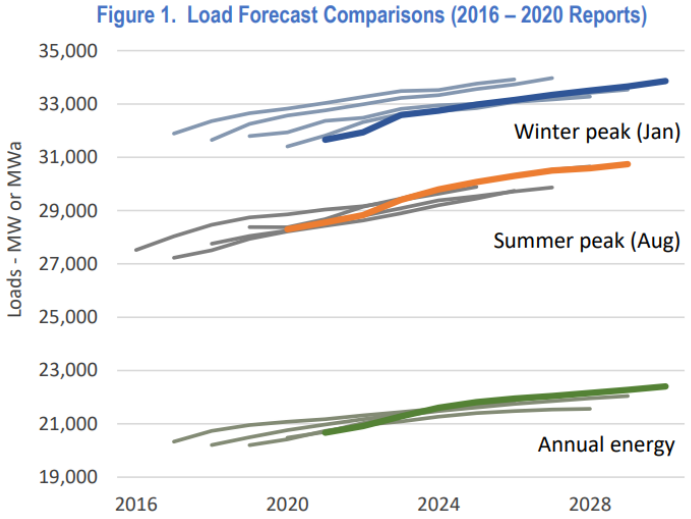


Power Planning Is Inherently Uncertain

- Utilities need to be flexible in their resource acquisitions to prudently balance costs and risks to their consumers.

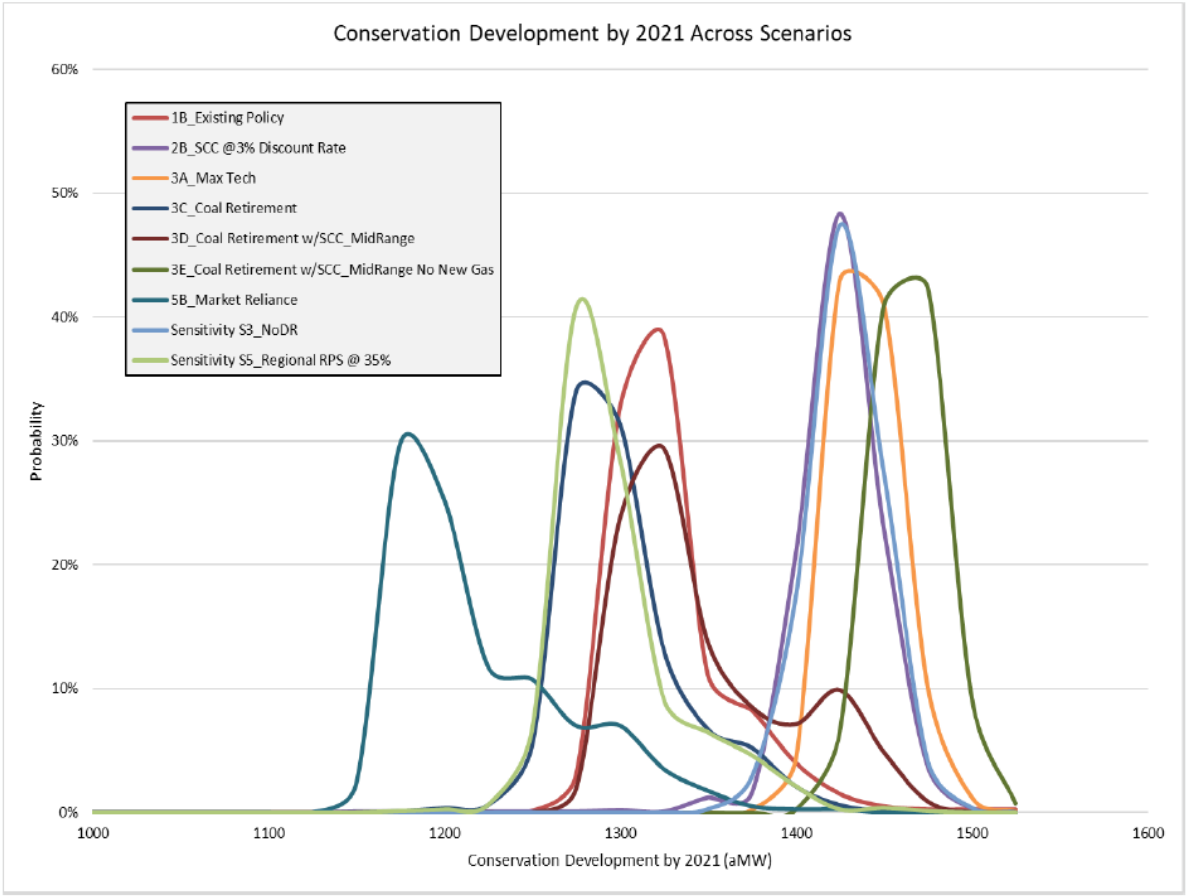
In its 2020 report, PNUCC shows the challenge in forecasting loads (and that was before the pandemic!)

Source: Pacific Northwest Utilities Conference Committee's Northwest Regional Forecast of Power Loads and Resources, March 2020



Variation Across Scenarios

Example Scenario Results from Seventh Plan

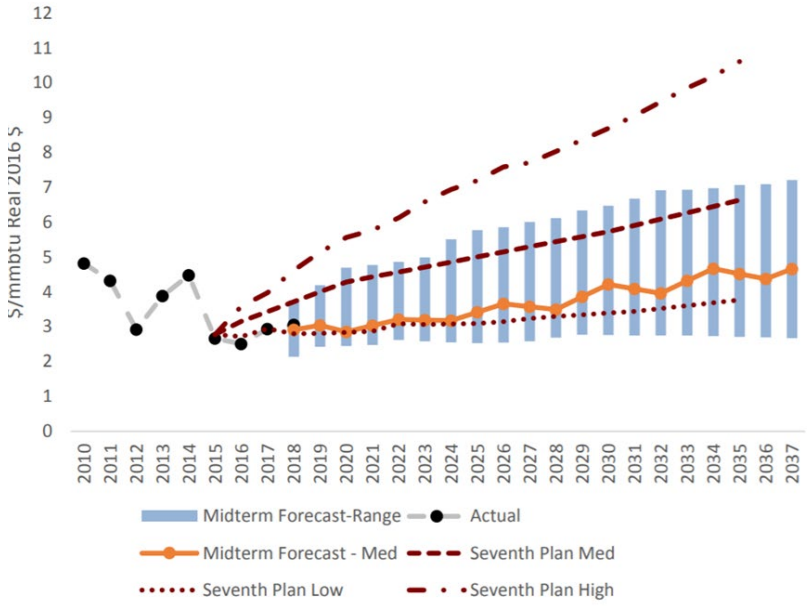


There is only one certainty in forecasting

Table 6 - 2: Updated Capital Costs for Seventh Plan Resources

Resource Technology	Seventh Plan (2016$/kW)	Midterm Assessment Update (2016$/kW)	Trend
Solar Photovoltaic (PV) 20 MW	$1,791 / $2,566	$1,350 - $1,500	Decrease (25-60%)
Wind (onshore) 100 MW	$2,382	$1,500 - $1,700	Decrease (30-40%)
CCCT Adv Wet Cooling 1x1 370 MW	$1,220	$1,100 - $1,300	Slight decrease
CCCT Adv Dry Cooling 1x1 425 MW	$1,369	$1,200 - $1,400	Slight decrease
Frame GT 200 MW	$859	$500 - $650	Decrease (30-40%)
Reciprocating Engine 220 MW	$1,382	$1,250 - $1,450	No change

Figure 3 - 5: Annual Natural Gas Prices at Henry Hub



7th Plan Mid-Term Assessment Figures

Public Power and EE

- Public power bears all costs, risks and benefits to acquiring EE.
- The Tiered Rate Methodology was carefully constructed to provide equity between utilities.
- Public power utilities are locally governed by democratically-elected boards and take seriously their responsibility to provide reliable and affordable power to their consumers.
- The most comprehensive mix of EE resources should be acquired, including momentum savings, market transformation and programmatic savings.

Our Vision for the 2021 Power Plan

- NWPCC modeling and analysis can provide **powerful insight** to regional utilities as they acquire resources, especially EE, to meet reliably and affordably serve their loads.
- Power planning is inherently uncertain and BPA and utilities need to be flexible in their resource acquisition strategies based on changing conditions through time.
- To the extent the region's EE acquisitions differ from the 2021 Power Plan's expectations, this can spark productive conversations about why a deviation occurred, what impact that deviation might have, and what, if any, course changes are warranted.
- The NWPCC can provide valuable insight and collaboration with public power and BPA as we jointly work to reliably and affordably serve consumers across the region.

Questions