ORDER NO. 26-150

ENTERED Apr 30 2026

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 86

In the Matter of NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL, 2025 Integrated Resource Plan.	ORDER

DISPOSITION: 2025 INTEGRATED RESOURCE PLAN ACKNOWLEDGED WITH CONDITIONS

This order memorializes our decision, made and effective at our April 28, 2026 Regular Public Meeting concerning Northwest Natural Gas Company, dba NW Natural's 2025 Integrated Resource Plan (IRP). The report with the recommendation of the Staff of the Public Utility Commission is attached as Appendix A.

At the April 28, 2026 Regular Public Meeting, we acknowledged NW Natural's 2025 IRP and action plan subject to the conditions recommended by Staff in its report, as revised at the public meeting. We adopted Staff Recommendation 1, modified as follows:

> Work with Energy Trust of Oregon (Energy Trust) to file updated acquisition targets for the action plan that capture all <u>feasible</u> cost-effective transport customer efficiency across Standard, Custom, and Strategic Energy Management (SEM) programs 90 days after IRP acknowledgement.

We adopted Staff Recommendation 2, modified as follows:

> Work with Energy Trust and electric utilities to develop a hybrid heating <u>work plan</u> ~~measure~~ that encourages customers to install heat pumps instead of central air conditioning by January 2027. Provide Staff with an update of measure development by December 2026.

We emphasize that in adopting the condition that NW Natural develop a work plan as opposed to a full measure that we expect NW Natural will produce a concrete and actionable work plan.

The Green Energy Institute at Lewis & Clark Law School provided comments requesting that we require NW Natural to check in with the Commission prior to purchasing community climate investments (CCIs), noting that the company had included a large number of CCIs in its IRP. While we did not adopt a specific requirement at the public meeting, we note that, as we have discussed in prior IRP proceedings, acknowledgment is not a guarantee of cost recovery.[1] Consistency with an acknowledged plan may be used as evidence in support of favorable ratemaking treatment in a future ratemaking proceeding, but the utility still must demonstrate that its actions remained prudent and reasonable, particularly in light of any material changes in the facts, circumstances, and assumptions that supported IRP acknowledgment. Thus, any CCI purchases, even if consistent with the IRP, will be reviewed for reasonableness. We also expect a continued dialogue with the company regarding CCIs and other large investments in Climate Protection Program compliance strategies in light of the uncertainty highlighted in the IRP.

The remaining Staff recommendations were adopted as set forth in Staff's report.

Made, entered, and effective Apr 30 2026.

Letha Tawney
Chair

Les Perkins
Commissioner

Karin Power
Commissioner

A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Circuit Court for Marion County in compliance with ORS 183.484.

[1] *See, e.g.*, *In the Matter of Northwest Natural Gas Company, 2022 Integrated Resource Plan*, Docket No. LC 79, Order No. 23-281 at 3(Aug. 2, 2023).

ITEM NO. RA3

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 28, 2026

REGULAR X **CONSENT** ____ **EFFECTIVE DATE** N/A

DATE: April 8, 2026

TO: Public Utility Commission

FROM: Alondra Regalado

THROUGH: Caroline Moore, Nora Xu, and Kim Herb **SIGNED**

SUBJECT: NORTHWEST NATURAL:
(Docket No. LC 86)
2025 Integrated Resource Plan.

STAFF RECOMMENDATION:

Staff of the Oregon Public Utility Commission (Commission) recommend that the Commission:

1. Acknowledge Northwest Natural's (NW Natural, NWN, or the Company) 2025 Integrated Resource Plan (IRP) Long-term Resource Strategy.

2. Acknowledge the Company's 2025 IRP Near-term Action Plan, subject to the following conditions:

   Recommendation 1: Work with Energy Trust of Oregon (Energy Trust) to file updated acquisition targets for the action plan that capture all cost-effective transport customer efficiency across Standard, Custom, and Strategic Energy Management (SEM) programs 90 days after IRP acknowledgement.

   Recommendation 2: Work with Energy Trust and electric utilities to develop a hybrid heating measure that encourages customers to install heat pumps instead of central air conditioning by January 2027. Provide Staff with an update of measure development by December 2026.

   Recommendation 3: Reflect the results of Energy Trust's evaluation of the Company's hybrid heating measures and forecasts in the next IRP's analysis.

3. Direct the Company to do the following while developing the next IRP:

> Recommendation 4: Host at least one workshop addressing its load forecast and demand scenario approach with Staff and Stakeholders. At the workshop, the Company should explain how the impact of the line extension allowance (LEA) phase-out will be meaningfully considered and make adjustments to the load forecast approach as appropriate based on feedback.
>
> Recommendation 5: Work with Staff and stakeholders to more comprehensively consider multiple factors that may drive demand scenario variations. Examples may include the LEA phase-out, electrification scenarios, and gas demand scenarios.
>
> Recommendation 6: Work with Energy Trust to improve visibility into fuel-switching trends, including how Energy Trust's incentives, market transformation efforts, and heat-pump adoption programs affect NWN's load forecast.

DISCUSSION:

Issue

Whether the Commission should acknowledge NW Natural's 2025 IRP long-term resource strategy and Action Plan.

Applicable Rule or Law

The Commission adopted least cost planning as the preferred approach to utility resource planning in 1989.[1] In 2007, the Commission updated its existing least cost planning principles and established a comprehensive set of "IRP Guidelines" to govern the IRP process. The IRP Guidelines, found in Order Nos. 07-002 (corrected by 07-047) and 08-339, clarify the procedural steps and substantive analysis required of Oregon's regulated utilities before the Commission considers acknowledgment of a utility's resource plan.[2] These orders are incorporated in OAR 860-027-0400(2), which requires any IRP to satisfy their requirements.

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1 Docket No. UM 180, Order No. 89-507, April 20, 1989.

2 Docket No. UM 1056, Order No. 07-002, January 8, 2007; Order No. 07-047 (correction), February 9, 2027. Additional refinements to the process have been adopted: See Docket No. UM 1302, Order No. 08-339, June 30, 2008 (IRP Guideline 8 later refined to specify how utilities

The IRP Guidelines and Commission rules required a utility to file an IRP with a planning horizon of at least 20 years within two years of its previous IRP acknowledgment order, or as otherwise directed by the Commission.[3] Further, the IRP must also include an "Action Plan" with resource activities that the utility intends to take over the next two to four years.[4] The utility's IRP should satisfy the IRP Guidelines and Commission rules for its determination of future long-term resource needs, its analysis of the expected costs and associated risks of the alternatives reviewed to meet its future resource needs, and its near-term Action Plan to achieve the IRP goal of selecting the "portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers."[5] This is often referred to as the "least cost/least risk portfolio."[6]

The Guidelines stated that an acknowledgment decision indicates whether the Commission finds that "the utility's preferred portfolio and action plan is reasonable at the time of acknowledgment."[7] The Commission may decline to acknowledge a utility's long-term plan, if it lacks "sufficient confidence that the IRP produces a plan and preferred portfolio representing the best combination of cost and risk for utility customers."[8] The Commission may "also decline to acknowledge specific action items if [the Commission] question[s] whether the utility's proposed resource decision presents the least cost and risk option for its customers."[9] Additionally, the Commission may provide direction on additional analysis or actions for the next IRP or IRP Update.[10]

Effective Mar 23, 2026, the Commission adopted updated IRP rules as codified in OAR 860 Division 90. While the updated rules do not impact acknowledgement decisions for this IRP, these rules will apply to the IRP Update and future IRPs.

Oregon's Climate Protection Program (CPP), codified in OAR 340-273-0010, establishes rules and requirements for certain air contamination sources that emit greenhouse gases or that cause greenhouse gases to be emitted. The CPP is administered by the Department of Environmental Quality (DEQ). It establishes

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should treat carbon dioxide (CO_2) risk in their IRP analysis); Docket No. UM 1461, Order No. 12-013, January 19, 2012 (guideline added directing utilities to evaluate their need and supply of flexible capacity in IRP filings).

3 Order No. 07-047, Appendix A at 1-3, Guidelines 1(c) and 3(a); OAR 860-027-0400.
4 Order No. 07-047, Appendix A at 5, Guideline 4(n).
5 OAR 860-027-0400(2)(a); Order No. 07-047, Appendix A at 1, Guideline 1(a).
6 Docket No. LC 79, Order No. 23-281, August 2, 2023, p. 1.
7 Docket No. UM 1056, Order No. 07-002, January 8, 2007, p. 24ff.
8 Docket No. LC 79, Order No. 23-281, August 2, 2023, p. 7.
9 Docket No. LC 58, Order No. 14-253, July 8, 2014, p. 1.
10 OAR 860-027-0400(7) and (10).

a declining statewide cap on greenhouse gases emitted from covered fuels, including natural gas, with the goal of reducing emissions 50 percent by 2035 and 90 percent by 2050.

Finally, Northwest Natural's previous IRP, LC 79, resulted in Order No. 23-281, providing the Company with a list of recommendations for the IRP Update, IRP, and Technical Work Group process.

Analysis

Background

NW Natural filed its 2025 IRP with the Commission on August 1, 2025. Two rounds of comments have been provided by Staff, interested parties, and the Company. Round 1 comments provided insights into Staff and stakeholder interests regarding joint system planning (JSP), electrification, non-pipeline alternatives, and alternative fuels risks. Round 2 comments focused on Staff's recommendations for Commission acknowledgement of the IRP.

Staff is grateful for the engagement and contributions made in this process, including written comments from Oregon Citizens' Utility Board (CUB) and the "Joint Advocates" including Green Energy Institute at Lewis & Clark Law School, Mobilizing Climate Action Together (MCAT), Community Energy Project (CEP), Climate Solutions, Electrify Now, and Sierra Club (Joint Advocates).

In the last IRP, Docket No. LC 79, NW Natural was left with an extensive list of recommendations for modeling expectations in the 2025 IRP. These recommendations were focused on pursuing a cost-effective, low-risk decarbonization pathway, using realistic assumptions and robust modeling, planning distribution needs in advance, and fully evaluating non-pipeline alternatives. Innovations in this work set a strong foundation for a meaningful planning conversation about the future of the gas system planning in a complicated and evolving landscape. Staff thanks NW Natural and its planning team for embracing many of Staff's draft recommendations, its willingness to consider inputs provided by a broad range of participants, and commitment to continue working on improving its planning tools and approaches moving forward.

IRP Overview

The 2025 IRP provides the Company's peak day capacity and energy needs as well as its emissions reduction compliance needs for the CPP over the 20-year planning horizon. The IRP shows a long-term downward trend in customer load, most notably in residential and small commercial sectors, driven primarily by the Company's economic forecast and energy efficiency. The capacity forecast shows a flattening trend for winter

peaks compared to the 2022 IRP. Between 2027 and 2050, the Company estimates its CPP compliance gap to expand from 0.09 million MTCO2e to 3.06 million MTCO2e.[11]

Considering these trends, key components of the Company's strategy include:

- Energy efficiency is the largest resource, providing a 26 percent peak reduction by 2050.
- Mist recall is the least-cost supply-side capacity resource, which meets design day needs through at least 2033.
- Increasing use of demand-response to address distribution system capacity needs, including targeted demand response offerings in three capacity constrained locations: Creswell, Dallas, and McMinnville.
- Community Climate Investments (CCI) purchases are maximized and cover the majority of the Company's CPP compliance needs not met by energy efficiency; RNG and RTCs will be used to fill in compliance gaps over time.
- Developing a hybrid heat-pump offering that address joint-system peaks and engaging in joint-system planning with electric utilities are enabling activities for the future.
- The Company is also monitoring carbon, capture, use and storage (CCUS), including through a Geological Screening Study for CO_2 sequestration and developing a CCUS pilot beginning in 2026.

In the IRP, the Company also commits to performing an Energy Burden Assessment every four years and hosting an energy planning and resources annual resource fair in partnership with community partners and service providers to increase community awareness of and involvement in energy planning and utility programs.

Discussion during the IRP review process focused on the Company's response to the emissions policy and electrification landscape. Stakeholders, including the Joint Advocates and CUB, broadly agree that coordinated planning between electric and gas utilities is essential to maintain reliability, keep energy affordable, and reduce emissions. Both groups criticize limitations in the Company's electrification study, noting omitted technologies and underestimated policy-driven adoption, and emphasize the importance of managed electrification for efficient infrastructure build-out. Stakeholders also call for clear disclosure of how compliance strategies will affect customer bills, stronger oversight and customer-focused reporting for pilot projects involving synthetic methane, CCUS, and hybrid heat pumps, and ongoing improvement in community engagement. They view the Company's non-pipeline alternatives (NPA) analysis as a positive start but too limited, urging inclusion of targeted electrification, thermal energy networks (TENs), and more transparent NPA funding information.

[11] NWN 2025 IRP, pp. 4-49.

Staff believes that the Company's focus on nimble compliance actions and least-regrets emissions reduction opportunities is a reasonable near-term approach given declining load and peak and the uncertainty created by the current policy, affordability, and regional resource adequacy landscape. In keeping with the long-term resource strategy, the near-term action plan incorporates proactive planning for a range of compliance options, appears to avoid large investments and takes a cautious approach to new programs, technologies, and strategies. NW Natural's near-term supply strategy prioritizes low near-term cost compliance tools and least-regrets emissions reduction opportunities, while limiting risk exposure from alternative fuels. This includes incremental amounts of Mist recall, investing in a local water resource recovery facility to support RNG targets, and feasibility studies for synthetic methane and CCUS pilot. Demand side options include energy efficiency and demand response programs.

Aggressively pursuing demand-side tools like energy efficiency, demand response, and geo-targeted programs are a least-regrets strategy and Staff believes that NWN has additional opportunities to tap their potential through transport EE offerings and stronger targets as low-regrets, low-cost compliance instruments.

That said, the Company's modeling suggests that a strategy that more aggressively pursues a transformative hybrid heating future can provide lower near-and-long-term costs to customers. Banking allowances and relying on CCIs can capture readily available compliance tools and lower near-term risks but exposes customers to higher long-term risks if late-period resources, like RNG, do not materialize in the volume or cost modeled. Staff appreciates the Company's efforts to make progress on alternative compliance options, its approach to considering strategic electrification in its IRP, and associated implementation strategies. Staff agrees with the Company that evaluating and implementing strategic electrification requires further progress on key joint planning assumptions to be effective in lowering total costs and having a net positive impact on joint energy system infrastructure costs and peaks, as indicated in its electrification study. However, NWN should not lose momentum in its efforts to capture least-cost, least-risk opportunities to pursue strategic electrification paired with demand response (DR) and geo-targeting where it can reduce gas peaks, lower CPP exposure, and avoid capital investment with long depreciable lives. Staff supports testing, not dismissing, these options within NPA screens and as system-wide demand side solutions.

With continued progress on joint-system planning, utilities, stakeholders, and partners like Energy Trust can increase visibility to cross-system interactions, better characterize long-term risks in CPP compliance, and effectively consider electrification in planning, programmatic, and ratemaking decisions.

To bridge the opportunities of a more transformative future, like the hybrid heating future, and the realities of readily available compliance tools, Staff sees progress on the Company's hybrid heating pilots as a top priority.

Needs Assessment

In the near-term, the Company forecasts slowed customer growth in Oregon due to lower population growth, reduced housing starts, and slower employment growth, whereas its long-term forecast projects flat or negative growth. The Company utilizes stochastic weather modeling, routine forecasting updates, and tracking customer acquisition (end-use technology trends, new construction, etc.) to keep its modeling current. In this IRP, NW Natural modeled alternative electrification scenarios and evaluated the impacts of heat pump adoption on residential and commercial demand.

Staff and stakeholders expressed concern that NW Natural's load forecast overestimated future demand by inadequately reflecting the line extension allowance (LEA) phase-out, building code changes, and trends towards electrification. Stakeholders emphasized that these policy shifts accelerate fuel-switching and reduce long-term reliance on gas demand, in ways that were not reflected in the Company's baseline assumptions.

In Round 2 Comments, Staff provided a draft recommendation for the Company to host at least one workshop addressing their load forecast and demand scenario approach with Staff and Stakeholders. In Reply Comments, the Company agreed that continued engagement in forecasting methods and demand drivers is appropriate.[12] NW Natural also agreed to continue its practice of capturing short-term macroeconomic dynamics through its near-term forecast, which would reflect the expectation to incorporate LEA phase-outs. Staff thanks the utility for its willingness to collaborate with stakeholders to refine its forecasting and demand methods and assumptions as appropriate.

Staff recommends that NW Natural continue to incorporate electrification scenarios and evaluate the maximum possible impact all these policies might have on the Company's system. Staff notes that more frequent and granular visibility into customer movements, such as new connections, disconnections, and fuel switching activity, can more promptly reveal trends or signals. The Company should work with Energy Trust to improve visibility into fuel-switching trends, including how Energy Trust incentives, market transformation efforts, and heat-pump adoption programs affect NWN's load forecast.

Recommendation 4: Host at least one workshop addressing their load forecast and demand scenario approach with Staff and Stakeholders. At the workshop, the

[12] OPUC LC 86 NW Natural Reply Comments, pg. 19.

Company should explain how the impact of the LEA phase-out will be meaningfully considered and make adjustments to the load forecast approach as appropriate based on feedback.

Recommendation 5: Work with Staff and stakeholders to more comprehensively consider multiple factors that may drive demand scenario variations. Examples may include the LEA phase-out, electrification scenarios, and gas demand scenarios.

Recommendation 6: Work with Energy Trust of Oregon to improve visibility into fuel-switching trends, including how Energy Trust's incentives, market transformation efforts, and heat-pump adoption programs affect NWN's load forecast.

Long Term-Resource Strategy

The Company describes having created a low regrets long-term resource strategy that meets future demand and compliance obligations flexibly and while retaining optionality. The Company's long-term resource strategy includes status quo energy efficiency to reduce energy, peak demand, and the need for CPP compliance resources. It includes a measured plan to expand existing demand response programs to meet peak demand requirements.

The Company lists the following strategies and approaches to describe its long-term resource strategy, items relating to Washington have been removed.

A-1	Continue to leverage cost-effective energy efficiency to reduce energy and peak demand requirements.
A-2	Continue to expand existing cost-effective demand response programs and explore the cost effectiveness of demand response offerings to meet peak demand requirements.
A-3	Continue to rely on existing resources and incremental amounts of Mist Recall to be able to meet peak demand requirements while evaluating other potential incremental options, such as city gate deals or increasing Newport Takeaway, to reliably serve peak-day demand.
A-4	Regularly update peak day forecasts and design winter load forecasts to ensure an appropriate mix of pipeline and storage resources required to reliably serve customers throughout the winter.
A-5	Use NW Natural resource optimization tool to evaluate pipeline contract extensions or capacity release deals under all demand- scenarios conducted in this IRP and maintain interstate pipeline options for customers whenever possible.
A-6	Continue to leverage cost-effective energy efficiency to reduce compliance resources requirements.
A-7	Plan and purchase compliance resources as needed to meet a 95th percentile emissions obligation profile for the upcoming CPP compliance period.

A-8	Bank any DEQ distributed allowances that result from this planning and apply them to a future compliance period.
A-9	Rely on incremental CCI purchases, RTCs, and RNG as other alternatives develop for CPP compliance.
A-10	Monitor and evaluate any opportunities for purchasing compliance instruments from other covered entities
A-18	Hybrid heating (dual-fuel space heating systems) presents a promising approach to reducing emissions on the gas system, while still maintaining reliability, affordability, and optionality for both energy systems. Accordingly, NW Natural will develop programs that promote the use of hybrid space heating systems and joint system planning.
A-19	Continue to evaluate and pursue RNG development projects and RTC purchases that qualify for voluntary SB 98 in Oregon and HB 1257 in Washington to continue to take steps forward with reducing the emissions associated with customers' use of the gas system.
A-20	Given the forecasted future reliance on alternative fuels and CCUS in all scenarios, continue to monitor market dynamics and update information as these resources develop.
A-21	Continue to find opportunities for gas and electric joint system planning to achieve emission reduction goals as affordably and reliably as possible.
A-22	Perform an Energy Burden Assessment at least every four years (pending current events at the time) to build upon our knowledge and analysis of low-income customers to inform energy affordability focused programs with the intent to continue to reduce energy burden for the most burdened customers.

Staff believes that the Company's nimble, measured long-term strategy is reasonable given the current landscape of uncertainty. However, this approach carries a certain level of long-term risks and NWN should continue forward momentum in its efforts to consider more transformational planning approaches for its next IRP and embrace available opportunities to more aggressively consider potential growth of demand-side options, including hybrid electrification.

Energy Efficiency

To meet energy and peak demand, the Company plans to leverage cost-effective energy efficiency (A-1). Staff agrees that continued use of energy efficiency and demand response programs to mitigate peak day demand is fundamental to a least-regrets, least-cost IRP. Staff recommends that the Company expand efforts for transport customers as discussed in later sections of this Staff report, corresponding to near-term action items B-2 and B-3.

Demand Response

Item A-2 in the long-term plan explains the Company's efforts to continue to expand existing cost-effective demand response programs and explore the cost effectiveness of demand response offerings to meet peak demand requirements. Staff is encouraged by this. In addition to a system-wide BYOT program, the Company is also pursuing

geographically targeted programs discussed in more detail in the Distribution System Actions section. In Reply Comments, the Company discusses potential joint-utility efforts to reduce demand response program costs and enhance benefits to customers.[13] Staff welcomes this initiative and looks forward to working with the Company on how joint utility efforts can support these benefits.

The Company hosts around 174 industrial and transport customers on an interruptible rate program. NW Natural states that it is working with Alliance of Western Energy Consumers (AWEC) to explore opportunities to expand the program.[14] This follows Recommendation 25 from the LC 79 Staff Report which directed the Company to reach out to AWEC to discuss whether the value of interruptible customers is being adequately represented in the IRP and make any appropriate updates in the 2022 IRP Update.[15] Since then, NW Natural has not provided any measurable targets or actions to move forward. Staff identifies this an opportunity to further explore additional response potential from the interruptible rate program.

Staff expectation for modeling in the next IRP:

1. *In the next IRP, the Company must propose clear and measurable targets for participation in and peak-hour reductions from its interruptible rate program.*

Compliance Resources

To meet future compliance resources needs in Oregon, the Company identifies energy efficiency as the first and most reliable means of reducing emissions and compliance costs (A-6). It then plans to meet a 95th percentile emissions obligation profile for the upcoming compliance period (A-7).

The Company plans to maximize CCI purchases within the limits of the CPP and bank compliance instruments, use incremental amount of RNG within the SB 98 cost caps, and supplement any gaps with Renewable Thermal Certificates (RTCs) (A-8, A-9). Beyond that, NW Natural plans to monitor and evaluate opportunities for purchasing compliance instruments from other covered entities (A-10). To support these efforts, the Company plans to evaluate and purse RNG development projects and RTC purchase that qualify for SB 98 (A-19). Given that the preferred portfolio selected high amounts of alternative fuels and CCUS in the late planning years, the Company aims to monitors alternative fuel and CCUS markets and development (A-20).

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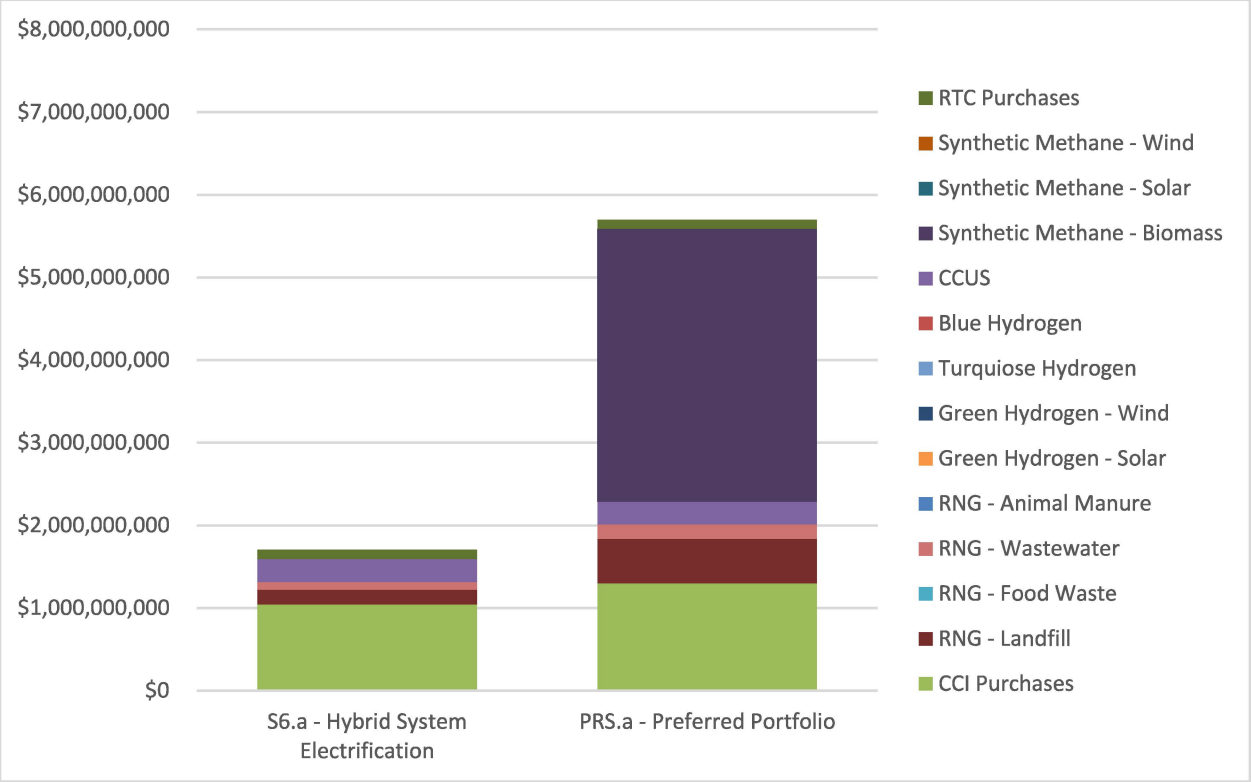
13 OPUC LC 86 NW Natural Reply Comments, pg. 20.
14 2025 NWN IRP, pg. 12-30.
15 NWN 2025 IRP, pg. A-44.

The Company presents options that allow flexibility and responsiveness to its situations. For example, its Compliance strategy maximizes CCI purchases, which helps the Company to buffer against the risk of higher emissions if the winters are colder than forecast, and positions it to retire lower cost compliance options to bank for future use. Its supply side strategy includes diversified types of RNG, planning for RTCs if needed, and planning for policy uncertainty in considering a potential role for SB 98 RNG. While its demand side strategy includes an innovative hybrid heating pilot program and new demand response programs, Staff sees opportunities for the company to more aggressively consider EE options for transport customers as part of a valuable long-term strategy.

Staff's primary concern regarding the long-term plan is the substantial costs of the PRS when compared to the Hybrid System Electrification scenario. The Company presents a justification for selecting the PRS over the Hybrid System Electrification scenario (S6.a) based on the additional substantial total system costs that the Company derives from its electrification study. Staff sees the insights of this analysis as exceptionally valuable but cautions against dismissing a path more akin to the S6.a.

S6.a assumes widespread adoption of hybrid heating systems, higher levels of electric heat pump penetration, and coordinated gas–electric system planning that shifts a portion of winter peak from the gas system to the electric system, and results in significant near-term and long-term gas system cost savings, were it feasible. However, this scenario depends upon (a) large-scale customer adoption of hybrid systems, (b) the availability of coordinated gas-electric planning and cost-sharing frameworks, and (c) formalized programs and incentives, which are not currently in place. Staff see the assumptions embedded in this scenario as a roadmap towards significantly more affordable approach towards meeting load, capacity, and compliance needs. Further, Staff sees actions items A-18 (hybrid heating) and A-21 (joint planning) as part of a critical path on this roadmap.

Figure 1: Total Cost Comparison PRS v. Hybrid System Electrification

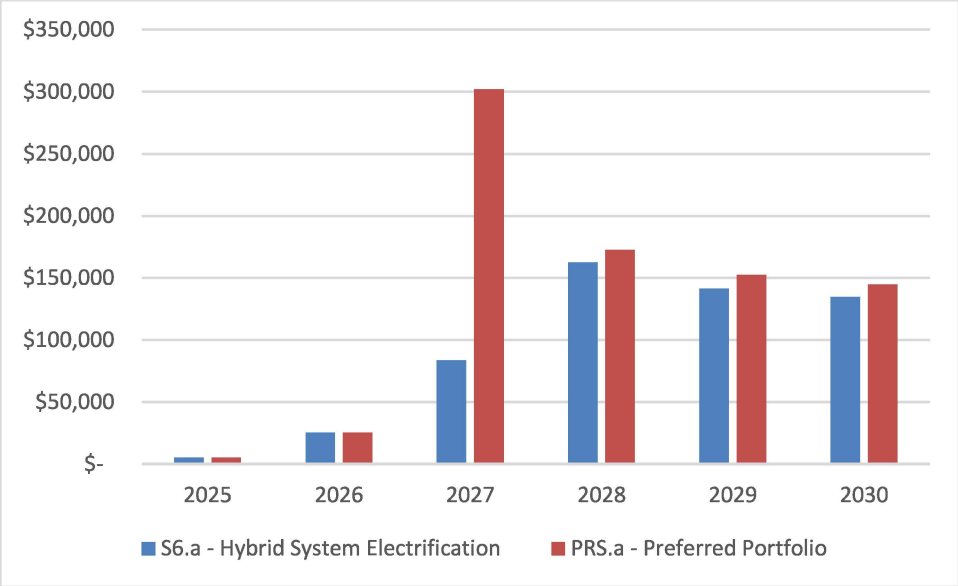


The Company explains that the hybrid scenario is meant as a counterfactual to the all-electric scenario but presents a case that argues that its forecasted NPV of annualized electrification costs of upwards of $15B, including customer equipment conversions and projected system costs for generation, transmission and distribution, tip the scales in favor of the PRS.[16]

Staff agrees that reflecting electrification costs, as well as uncaptured customer benefits, are critical for optimized energy system planning, and sees the differences in the gas system portfolios as providing a valuable north star for planning. The cost difference between the PRS and the Hybrid System Electrification scenario is over $4 billion dollars over the planning horizon (Figure 1) and $250 million between now and 2030 (Figure 2). These differences are driven by the PRS's higher near-term CCI costs beginning in 2027, increased reliance on RNG, and especially its substantial dependence on synthetic methane later in the horizon.

[16] 2025 NWN IRP, pg. 1-26.

Figure 2: Hybrid v PRS Near term cost differences[17]



While Staff recognizes that NWN is not yet ready to pivot from a pilot to full-scale hybrid heating programs before the CCI purchases in 2027, the analysis hints at the value of advancing hybrid electrification strategies, particularly in the long term. Over time, this shift could enable the Company to avoid the most expensive components of the PRS, particularly synthetic methane and RNG. Additionally, this work by the Company helps set a bar for what constitutes beneficial electrification and informs what analysis is needed for joint system planning (see Joint System Planning & Electrification). Staff sees this as a critical signal that the Company should use the period between now and the next IRP to determine how it might redirect long-term decarbonization efforts toward hybrid heating and away from the highest-cost supply-side resources.

Enabling Strategies

The Company's work on studying electrification options and a hybrid heating program have continued to highlight the need for coordinated gas and electric planning. The lack of coordination has become a limiting factor in being able to optimize energy strategies that meet reliability needs while minimizing costs and emission impacts. Nonetheless, Staff finds that a measure development process with Energy Trust, rather than a NW Natural led pilot, is the lower-risk, higher-value approach to meeting near-term planning, compliance, and system needs. While the Company continues its efforts in joint

[17] 2025 IRP Scenario Compliance Results Workpaper.

planning and electrification, Staff finds it a reasonable hedging approach to study alternative fuels, CCUS and RNG development projects.

Equity

Item A-22 of the long-term plan describes the Company's goals to perform an Energy Burden Assessment (EBA) every four years to build upon their knowledge and analysis of low-income customers to inform energy affordability focused programs. Stakeholders argued that the IRP lacks action towards addressing the findings of the 2024 EBA, requesting that IRP integrate affordability metrics, such as energy burden thresholds, into each scenario. Stakeholders also requested that NW Natural provide income-segmented bill impacts for the different compliance pathways.

Staff does not recommend any further action from the Company because of recent updates in OAR 860-090-0060. In future IRPs, near-term costs will need to estimate a range of annual net costs to Oregon customers over the next five years associated with a given resource portfolio. Alongside this would be the requirement to address community impacts, which would show the ranges for the future impacts of the portfolio on communities within the Oregon utility service area.

Near-Term Action Plan

The Company's near-term actions reflect the outcomes of the modeling for its preferred resource strategy. These include:

- Meeting peak day capacity with energy efficiency and Mist recall (B-1).
- Acquiring energy efficiency for residential, commercial and industrial sales customers through existing programs with Energy Trust (B-2) and continuing to work on energy efficiency programs for transport customers (B-3).
- Maximizing the use of CCIs for compliance for the first compliance window, with a buffer for weather (B-4), banking those not needed (B-5).
- Procuring incremental amounts of RNG (B-6) and conducting studies on synthetic methane production (B-7).

Staff believes that the Company's near-term actions will effectively advance the Company's long-term strategy while allowing for flexibility. However, Staff believes that NWN has additional opportunities to tap the potential of demand-side programs as least-regrets, low-cost compliance instruments. Staff discusses the action items by topic and provides a recommendation to the Commission for each action item.[18]

[18] Action items pertaining to Washington have been removed.

System Capacity Resource Actions

B-1 Meet customer peak day deliverability requirements by acquiring peak day energy efficiency and recalling Mist over the next 5-years, subject to updated load forecasts, information about Woodfibre LNG, other updates to our existing resources, or updated information on alternative options as follows:

Gas Year	Peak Day Energy Efficiency	Mist Recall
2026-2027	7,500 Dth/day	5,000 Dth/day
2027-2028	8,500 Dth/day	65,000 Dth/day
2028-2029	9,000 Dth/day	5,000 Dth/day
2029-2030	9,000 Dth/day	-
2030-2031	10,000 Dth/day	5,000 Dth/day

Mist Recall (Action Item B-1)

NW Natural proposes to use incremental amounts of Mist Recall to support its capacity strategy. Staff and stakeholders find it reasonable to continue to leverage Mist Recall as the least-cost supply-side resource to meet capacity requirements.[19] As stated in Action Item B-1, the utilization of Mist (and energy efficiency) over the next five years is subject to updated load forecasts and information about the Woodfibre Liquefied Natural Gas (LNG) Facility.

Oregon Compliance Resource Actions

B-2 Working with Energy Trust of Oregon, acquire cost-effective first year energy efficiency therm savings IRP targets outlined below, or the revised amounts identified by the Energy Trust Board over the next 5 years through existing programs for residential, commercial and industrial sales customers.

Calendar Year	Oregon Sales First Year Therm Savings Targets
2026	5.518 - 6.56 million
2027	6.209 - 7.17 million
2028	6.494 - 7.90 million
2029	6.609 - 8.00 million
2030	7.147 - 8.68 million

B-3 Continue to expand the energy efficiency programs for Oregon transportation customers.

B-4 Maximize CCI purchases of 15 percent of NW Natural's emissions obligation in the first CPP compliance period, 2025-2027 calendar years, and 20 percent of NW Natural's emissions obligation in the second and third compliance periods, 2028-2029 and 2030-2031 calendar years as shown below:

[19] *See* CUB Round 2 Comments, page 13.

Calendar Year	Expected # CCI Purchases*
Compliance Period 1: 2025-2027	2,014,000
Compliance Period 2: 2028-2029	1,712,000
Compliance Period 3: 2030-2031	1,677,000
Notes: *Actual CCI amounts will be weather dependent.	

B-5	Bank any DEQ distributed instruments from the first CPP compliance period that are in excess of NW Natural's emissions obligation.
B-6	As identified in the Preferred Resource Portfolio (PRS.a results) and in all sensitivities in scenario 1 except for S1.a, acquire RNG from a local on-system water resource recovery facility as set forth in the table below and retire the RTCs on behalf of customers consistent with CPP compliance.
B-7	As identified in the Preferred Resource Portfolio (PRS.a results), synthetic gas is a potential cost-effective emission reduction pathway. Developing synthetic methane derived from woody biomass could have significant additional benefits such as a wildfire mitigation program. Accordingly, NW Natural will develop a Biomass Derived Synthetic Methane Feasibility Study. Conduct a detailed 12-month study assessing woody biomass feedstocks in Oregon for synthetic methane production via gasification + syngas methanation and CO_2 + green hydrogen methanation.

Energy Efficiency: Transportation Customers (Action Item B-3)

NW Natural's action plan does not detail the quantity of transport EE included in the preferred portfolio, specify the planned pathways to procure that resource, or outline the timing to accelerate the acquisition. Based on the cost-effectiveness and availability of transport energy efficiency, Staff recommends the Commission add conditions to NW Natural's Action Item B-3.

Staff finds the record demonstrates higher levels of available, cost-effective EE potential for transport customers. In 2023, NW Natural contracted with Applied Energy Group (AEG) to conduct a transport energy efficiency potential study that identified 1.49 million therms of annual cost-effective efficiency between 2023 and 2031.[20] Further, the Company's own preferred portfolio shows over 6 million therms of transport energy efficiency acquisition by 2030.[21]

Despite the high levels of procurement in the preferred portfolio, Action Item B-3 does not specify a therm target by 2030. While the Company's modeling includes 6 million therms of savings by 2030, Staff understands that level of acquisition requires a substantial course correction. Despite a successful 2025, where Energy Trust acquired

[20] *See* NWN July 10, 2023 Transportation Customer Energy Efficiency Presentation, https://www.nwnatural.com/-/media/nwnatural/pdfs/july2023_workshop1_transportationcustomeree_presentedandposted.pdf?rev=3df996863721454188eb785a792a7146&hash=ED3D3BCD852D43E68AFECC1FEBDD542A.

[21] *See* "Workpapers_2025 IRP Scenario Compliance Results".

95 percent of NW Natural's IRP target of 550,619 therms, the preferred portfolio target jumps to 1,110,016 therms in 2026.[22] However, NW Natural requested Energy Trust only offer a Standard Track program, which has forecasted savings of 300,319 therms in 2026.[23] Offering multiple pathways to acquire savings increases the likelihood of acquiring savings. Therefore, Staff recommends the Commission direct NW Natural to offer three programmatic tracks with Energy Trust: Standard, Custom, and SEM. Staff also recommends NW Natural initiate this work immediately, so that 90 days after IRP acknowledgement, the Company can file updated acquisition targets for the action plan that capture all cost-effective transport customer efficiency across Standard, Custom, and SEM.

Transport energy efficiency is a least cost compliance resource and that could likely expand to undercut additional compliance resources. Energy Trust's 2024 savings of 200,126 therms had a levelized cost of $2.79/MMBtu.[24] Such costs make transport efficiency less than half the cost of CCIs and thus a fraction of more expensive compliance resource costs. In comments, NWN noted working on new industrial program in Washington. Staff recommends NW Natural consider bringing such programs to Oregon in addition to the expanded offerings with Energy Trust.

Recommendation 1: Work with Energy Trust to file updated acquisition targets for the action plan that capture all cost-effective transport customer efficiency across Standard, Custom, and SEM program 90 days after IRP acknowledgement.

Community Climate Investments (B-4 and B-5)

The Company's CPP compliance strategy relies on planning for and procuring compliance resources to meet 95th percentile emissions obligations (Action Items A-7, B-4 and B-5). The Company will procure CCIs to meet 15 percent of the Company's compliance obligation by purchasing $261 million worth CCIs (and $70 million of supplemental RTC purchases) by the first compliance period (2025-2027).

Staff supports the Company's strategy to maximize CCIs in the near-term with supplemental RTC and RNG purchases. The model is selecting resources based on cost-effectiveness, after energy efficiency and demand response programs reduce compliance obligation. Given the pricing trajectory of CCIs, Staff supports the Company's strategy of converting CCIs into compliance instruments that can be banked for future use. CCI prices (converted to $/MMBtu) start at $6.90/MMBtu in 2027 and go

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22 *See* OPUC IR 10 and "Workpapers_2025 IRP Scenario Compliance Results".
23 *See* NW Natural response to OPUC IR 10.
24 *See Energy Trust of Oregon 2024 Annual Report,* (April 15, 2025), p. 43, https://www.energytrust.org/wp-content/uploads/2025/04/Energy-Trust-2024-Annual-Report.pdf.

up to $7.06/MMBtu in 2030.[25] The next cheapest compliance options in the action plan window are wastewater RNG that starts at $15/MMBtu and goes down to $12/MMBtu in 2030, landfill RNG that is available in 2028 at $12.76/MMBtu, and RTCs available immediately, at $19/MMBtu.[26]

Staff confirms through workpapers that without CCIs, compliance would likely be significantly more expensive. Every scenario that restricts or removes CCI's becomes more expensive, see Table 1 below. This is primarily driven by higher costs alternative fuels and technology. Removing or reducing CCIs forces the model to purchase earlier and larger volumes of synthetic methane, more RTCs (less flexible and often pricier in constrained years), more RNG (which is supply-limited and higher-cost) and more CCUS (only from 2035 onward, so limited help early).

Table 1: Scenario Compliance Cost[27]

Scenario	**Total Compliance Cost**	**Difference from Baseline (PRS.a)**
S1.c High-cost *(Tight CCI limits, delayed access)*	$14.996B	+32.3 percent
S1.e No Banking *(Restricts strategic CCI carryforward)*	$12.878B	+13.6 percent
S1.d RTC Dependence *(Limits CCIs, forces RTC purchases)*	$13.381B	+18.1 percent

The Joint Advocates expressed concern about the Company's over-reliance on CCIs and banking allowances, when it could prioritize structural emissions reductions instead. Staff acknowledges this concern and supports maximization of energy efficiency and demand side resources in Recommendation 1 and Recommendation 3.

Local Water Resource Recovery Facility (Acton Item B-6)

Staff finds that the Company's RNG strategy is an important component of its near-term compliance approach. After cost-effective EE and CCI's RNG is the cheapest compliance option in the action plan window. Wastewater RNG starts at $15/MMBtu and goes down to $12/MMBtu in 2030, landfill RNG that is available in 2028 starts at $12.76/MMBtu, and RTCs available immediately, at $19/MMBtu.[28]

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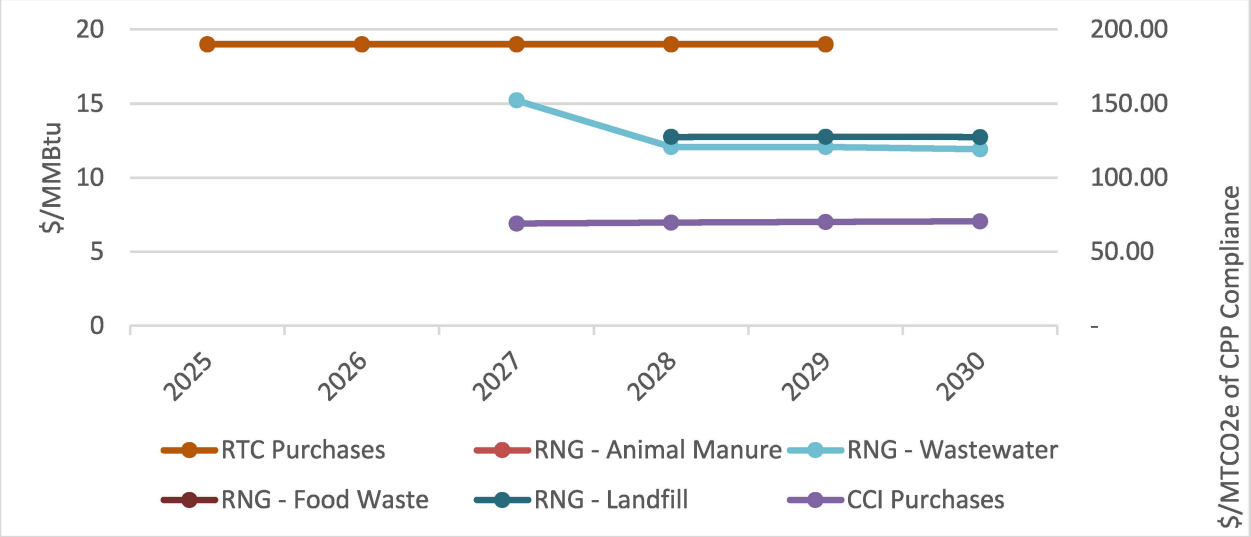
25 2025 IRP Scenario Compliance Results Workpaper.
26 2025 IRP Scenario Compliance Results Workpaper.
27 2025 IRP Scenario Compliance Results Workpaper.
28 2025 IRP Scenario Compliance Results Workpaper.

Figure 3: Weighted Unbundled Compliance Resource Cost per Unit of Natural Gas CPP Obligation[29]



NW Natural proposed to acquire RNG from a local, on-system wastewater resource recovery facility. It was modeled to be available in 2027, and all but one sensitivity for Scenario 1 selected the resource.

Synthetic Methane (Action Item B-7)

The preferred portfolio includes synthetic methane in increasingly large quantities starting in 2038. Per action item B-7, the Company seeks to develop a Biomass Derived Synthetic Methane Feasibility Study. NW Natural has explained that woody biomass is abundant in Oregon and thus a suitable source for synthetic methane production. Throughout the commenting period, Staff and stakeholders questioned the uncertainty and risk around the Company's use of synthetic methane. The Company has explained that its strategy is to first seek more answers before committing to any significant investment. Staff finds that the Company is taking a cautious approach to synthetic methane and initiating a feasibility study well before it is made selectable in the portfolio model shows good faith efforts.

Compliance Resource Actions

B-12	Continue to acquire RNG to achieve goals as set forth below to enable NW Natural to continue to reduce emissions associated with customers' use of the gas system, achieve compliance under CPP while maximizing CCI purchases (see B-4 above) and compliance

[29] 2025 IRP Scenario Compliance Results Workpaper.

	under the CCA, while remaining in cost containment parameters established in SB 98 and HB 1257.
B-13	Energy Efficiency remains a key demand-side resource and compliance resource for the Company. Accordingly, NW Natural will develop a Commercial Gas Heat Pump pilot beginning in 2026.
B-14	As identified in the Preferred Resource Portfolio (PRS.a results), Carbon Capture and Sequestration is a near-term compliance resource for the CPP. Accordingly, NW Natural will develop a Geological Screening Study for CO_2 Sequestration in Northwest Oregon.
B-15	As identified in the Preferred Resource Portfolio (PRS.a results), Carbon Capture and Sequestration is a compliance resource for the CPP and CCA. Accordingly, NW Natural will develop a commercial CCUS pilot beginning in 2026.
B-16	Develop a hybrid heating pilot that explores joint system planning with an electric utility partner, including demand response/capacity payments. File this pilot (or provide status update) on or before the first IRP Update.
B-17	Develop a hybrid heating program providing cost effective emissions reduction incentives.

SB 98/HB 1257 RNG (Action Item B-12)

Overall, Staff finds that the Company's voluntary RNG strategy can be seen as a risk mitigation strategy that helps the Company secure supply side GHG emission reduction strategies. The Company has emphasized that although SB 98 RNG targets are voluntary, it can mitigate policy risk and allow for "optionality." However, Staff notes that the IRP's scenario analysis indicates that voluntary RNG is not always the most cost-effective decarbonization strategy. For example, in the hybrid electrification scenario, SB 98 RNG costs through 2030 total approximately $323.8 million compared to $351.2 million in the PRS, about a $28 million difference over five years. This cost spread suggests that more aggressive progress on hybrid electrification could avoid some SB 98 RNG expenditures. While Staff recognizes the Company is not currently positioned to fully pursue the hybrid scenario, this result reinforces the value of advancing hybrid electrification strategies and ensuring that future voluntary RNG procurement is demonstrably prudent based on the information available at the time.

CCUS (Action Item B-14 & B-15)

By 2036, the preferred portfolio selects large quantities of CCUS to meet CPP compliance requirements. The Company plans to utilize this post-combustion carbon capture technology to reduce emission from natural gas building heating systems. Near-term Action items include: 1) Geological Screening Study for CO_2 Sequestration in Northwest Oregon, to study where the capture carbon can be stored; and 2) a CCUS Pilot program from April 2026 through December 2030.

Staff has offered its general support for the measure, as CCUS is framed as a structural emission-reduction tool that could mitigate CPP compliance expenses if available at the modeled costs. Staff flagged a potential timing gap because the CCUS pilot concluded

in 2030 and the CCUS ramps up in 2036, delays or unfavorable results can add complexity to any course corrections to alternative resources. Ultimately, Staff recognizes the "optionality" in the Company's strategy and that it is taking a "cautious" approach rather than assuming this is a locked-in near-term resource.

Hybrid Heating Pilot (Action Item B-13, B-16 & B-17)

Throughout the commenting period, Staff signaled is optimism about the pursuit of hybrid solutions as least-regrets near-term investments. Staff finds that beginning a measure development process at Energy Trust, rather than a limited NW Natural led pilot, is the lower-risk, higher-value approach to meeting near-term planning, compliance, and system needs. NW Natural's second reply comments emphasize the need for clear cost-allocation mechanisms and cautions against moving too quickly to program scale. Staff agrees that joint gas-electric cost recovery must be addressed, but Staff's analysis demonstrates that sufficient data, market maturity, and system benefits exist today to justify proceeding with a measure available by 2027.

Staff also agrees with NW Natural that program-scale deployment requires a better understanding of joint-system reliability gaps and consideration of new gas-electric cost and benefit allocation structures. Staff's opinion is that the need to determine cost-allocation justifies starting coordinated measure development now. The foundation for that cost-allocation based on costs and benefits exist with current avoided costs filed in UM 1893.

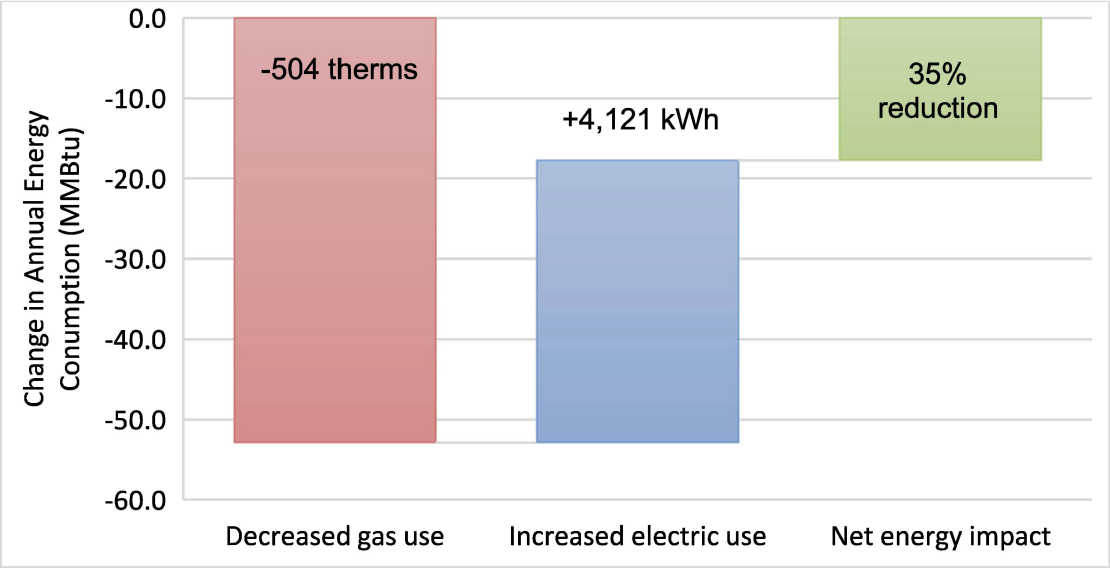
Current avoided costs demonstrate significant electric and gas value for hybrid heat pumps. Based on avoided compliance costs filed in UM 1893, adding an electric heat pump to an existing gas furnace has a net present value of $9,776.[30] On top of the avoided compliance cost, hybrid heat measures would also provide two values to the electric system. First, a measure designed for a more-efficient heat pump over a code-minimum central air conditioner would have electric savings. Second, adding a heat pump to a gas furnace instead of replacing the gas furnace with a heat pump reduces electric capacity needs. The cumulative gas and electric values indicate there is sufficient planning and system value to buying down the incremental cost between a central air conditioner and an air source heat pump.

Hybrid heat pumps provide a unique value in that they increase overall energy efficiency. Using the values NW Natural provided in Figure 10.7, Staff notes that adding an ENERGY STAR heat pump to an existing gas furnace requires 35 percent less

[30] Based on avoided costs adopted by the Commission in Order No. 25-500. Assuming discount rate of 3.87 percent as filed by NW Natural, a 15-year measure life for a ducted heat pump, and 504 therms reduced per ICF analysis.

energy than solely using the existing furnace. Pursuing hybrid heat measures reduces the State's overall energy needs, making it easier to achieve longer-term planning and policy goals.

Figure 4: Staff analysis of net source energy impacts of adding an ENERGY STAR heat pump to an existing gas furnace based on values provided in Table 10.7 of the NW Natural 2026 IRP[31]



Staff's Round 2 comments highlighted additional rationale for measure development beyond energy savings and avoided cost value.

1. Hybrid heat pump configurations exist in tens of thousands of NW Natural customer homes today.[32] There is limited technology risk in deploying.
2. New cooling equipment represents 30 percent of the Northwest residential HVAC market.[33] Intervening in the central air conditioning market does not add new electric load, it reduces electric load by incenting more-efficient heat pumps.

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31 Staff used conversion factors to convert therms and kWh to MMBtu. Staff assumed a site to source multiplier of 1.05 for natural gas and 2.5 for electricity, based on review of tools such as NREL's ResStock and EPA's eGRID data. A lower site-to-source multiplier for electricity is likely given the Northwest's electricity source mix.

32 Staff analysis of Northwest Energy Efficiency Alliance Residential Building Stock Analysis 2022 data, *Mechanical_One_Line* and *Mechanical_HeatingAndCooling,* data accessed January 21, 2026.

33 Bonneville Power Administration, *May 2025 Momentum Savings & Market Research Quarterly Call*, (May 2025), p. 20, https://www.bpa.gov/-/media/Aep/energy-efficiency/momentum-savings/may-2025-quarterly-call-presentation.pdf.

3. Average cost for an efficient heat pump in Oregon are significantly lower than NW Natural assumptions in the ICF electrification study.[34] Overstated incremental costs make electrification scenarios appear more costly than reality.

Finally, Staff believes that the topic of hybrid heating measures at Energy Trust is aligned with Oregon Department of Energy's State Energy Strategy and with Docket No. UM 2417, the PUC's implementation of Executive Order 25-29 on reducing greenhouse gas emissions and advancing clean energy. Since Staff submitted Round 2 comments, the Oregon Building Codes Division approved updates to the residential energy code requiring new housing to be built with heat pumps instead of ducted air conditioning.[35] Staff finds its recommendation to pursue hybrid heat measure development with Energy Trust as aligned with the Building Codes Division decision to move away from central air conditioning to heat pumps.

Staff recommends that NW Natural provide an update on measure development by December 2026. Updates should include joint planning milestones, three-year deployment targets, gas CPP valuation, and electric efficiency and capacity valuation.

Recommendation 2: Work with Energy Trust and electric utilities to develop a hybrid heating measure that encourages customers to install heat pumps instead of central air conditioning by January 2027. Provide Staff with an update of measure development by December 2026.

Recommendation 3: Reflect the results of Energy Trust's evaluation of the Company's hybrid heating measures and forecasts in the next IRP's analysis.

Distribution System Actions

B-18	Raise incentives for customers in the Creswell area for the BYOT program for the next 3-years (2026-2028) aimed at achieving 3.6 peak therm hour savings at a cost not to exceed an incremental $2,000 to baseline.
B-19	Pursue a 3-year Geo Behavioral DR program with large commercial customers and industrial customers in the Creswell area to achieve 13.4 peak hour therms at a cost not to exceed $24,400.
B-20	Continue scoping the Creswell Uprate of approximately 1.9 miles of 3" and 2" wrapped steel main from an MAOP of 150 psig to 300 psig, between Creswell Gate Station to the end of High Pressure main, with an anticipated in-service date of 2030.
B-21	Update analysis for Creswell area on an annual basis and report updated analysis through IRP Updates or subsequent IRPs until the Uprate is put into service or the analysis shows the

[34] *See* Docket No. LC 86, *Staff's Round 2 Comments*, (Jan. 28, 2026), p.25, https://edocs.puc.state.or.us/efdocs/HAC/lc86hac343411028.pdf.

[35] *See* Oregon Building Codes Division, Residential & Manufactured Structures Board, February 18, 2026 meeting, p. 10, https://www.oregon.gov/bcd/boards/Documents/rmsb-20260218-agenda.pdf.

	Uprate is no longer needed. The Company anticipates continuing action items B-18 – B-20 beyond the 3-year action plan window and updating this analysis will inform the decision to continue or discontinue these NPA projects.
B-22	In partnership with Energy Trust of Oregon, plan and develop a 3-year GeoTEE project starting in 2027 in the Dallas area with the goal of achieving 20 peak hour localized therm savings incremental to baseline energy efficiency efforts.
B-23	Raise incentives for customers in the Dallas area for the BYOT program for the next three years (2026-2028) aimed at achieving 9.8 peak therm hour savings at a cost not to exceed an incremental $8,800 to baseline.
B-24	Pursue a 3-year Geo Behavioral DR program with large commercial customers and industrial customers in the Dallas area to achieve 39.0 peak hour therms at a cost not to exceed $98,900.
B-25	Continue scoping the Dallas System Reinforcement, which includes a) replacing approximately 1,100 ft of 4” wrapped steel main with 6” wrapped steel main and b) uprating the Dallas Feeder from an MAOP of 175 psig to 300 psig, with an anticipated in-service date of 2036.
B-26	Update analysis for Dallas area on an annual basis and report updated analysis through IRP Updates or subsequent IRPs until the system reinforcement is put into service or the analysis shows the system reinforcement is no longer needed. The Company anticipates continuing action items B-22 – B-25 beyond the 3-year action plan window and updating this analysis will inform the decision to continue or discontinue these NPA project.
B-27	In partnership with Energy Trust of Oregon, plan and develop a 3-year GeoTEE project starting in 2027 in the McMinnville area with the goal of achieving 35 peak hour localized therm savings incremental to baseline energy efficiency efforts.
B-28	Raise incentives for customer in the McMinnville area for the BYOT program for the next three years (2026-2028) aimed at achieving 15.6 peak therm hour savings at a cost not to exceed an incremental $18,800 to the baseline.
B-29	Pursue a 3-year Geo Behavioral DR programs with large commercial customers and industrial customers in the McMinnville area to achieve 104.8 peak hour therms at a cost not to exceed $331,500.
B-30	Continue scoping the two options for the McMinnville Feeder System Reinforcement which includes: a) installing compression between the Christensen Regional Station and Amity to raise the line pressure along the McMinnville feeder, increasing pipeline capacity to the McMinnville load center; or b) loop the existing 6-inch McMinnville Feeder with 5.2 miles of 400 MAOP 8” wrapped steel main to increase pipeline capacity to the McMinnville load center, with an anticipated in-service date of 2049. The costs of the two options will be examined annually and the lower cost option will be eventually selected when the pipeline solution is needed to implement.
B-31	Update analysis for McMinnville area on an annual basis and report updated analysis through IRP Updates or subsequent IRPs until the system reinforcement is put into service or the analysis shows the system reinforcement is no longer needed. The Company anticipates continuing action items B-27 – B-30 beyond the 3-year action plan window and updating this analysis will inform the decision to continue or discontinue these NPA projects.

Creswell, McMinnville and Dallas (Action Item B-18 through B-32)

For the 2025 IRP, the Company conducted an NPA analysis to defer or avoid infrastructure projects in capacity constrained areas that were identified in the Forward-looking Distribution System Plan (DSP). The plan allows the Company to anticipate system constraints up to five years in advance. Staff appreciates the Company's progress in identifying constrained feeders and presenting both NPA and pipeline options. The 2025 DSP identified three areas where designed capacity would be insufficient at some point between 2028 and 2050 (leading to a pressure drop) based on forecasted demand growth: Creswell, Dallas, and McMinnville.[36] The Company conducted an NPA analysis for the three capacity constrained areas, which included a review of (1) a benefit-to-cost ratio of demand side options including Historical EE, GeoTEE, BYOT DR, and Behavior DR; (2) peak hour load forecasts for the areas with and without NPA efforts; and (3) annual energy savings. The Company discussed its preferred option after comparing the pipeline and non-pipeline solutions.

In Comments, Staff signaled support of the current NPA measures for the McMinnville, Creswell, and Dallas areas given the condensed timeline and stated that the Company "should elevate NPA from a narrow operational tool to a strategic compliance and systematic resource."[37] Staff clarifies that its intent is not to require NW Natural to modify its overall NPA framework, but rather to reaffirm that the Company should recognize and account for the full range NPAs available and their benefits. Currently, the Company evaluates the following NPAs in the DSP:

Table 2: NPAs Evaluated in the DSP

Distributed Energy Resources	Mobile/fixed geographic targeted CNG storage
	Mobile/fixed geographic targeted LNG storage
	On-system gas supply
	Geographically target underground storage
Demand Response	Interruptible schedules (DR by rate design)
	Geographically targeted interruptible agreements
	Geographically targeted Res & Com demand response
Energy Efficiency	Peak hour savings from normal statewide EE programs
	Geographically targeted peak-focused energy efficiency

Staff believes that the Company is on the right path. The Company evaluates the cost-effectiveness of NPA options against traditional system reinforcement options and then

[36] NWN 2025 IRP, pg. 12-31.
[37] LC 86 Staff Round 2 Comments, pg. 34.

chooses an option or combination of NPAs based on cost-effectiveness and predict timeline for delaying/ or avoiding an engineering option.[38] The Company has pursued the BYOT DR program. In an effort to achieve larger peak therm savings over the next three years, Staff supports Action Items B-18, B-23, and B-28 raising BYOT incentives for customers, Action Items B-19, B-24, and B-29 which seek to establish a geo behavioral DR program with large commercial and industrial customers in the constrained areas, and a partnership with Energy Trust of Oregon to develop a GeoTEE project in Dallas and McMinnville.

Staff notes that in the last IRP, Brattle provided the Company with a DR potential study that showed multiple cost-effective demand-side programs for both residential and small commercial and industrial customers that could enhance the Company's NPA portfolio, and that are not currently considered.[39] Cost-effective programs highlighted in the report include pricing-based DR (like critical peak pricing and time-of-use) which ranked the best amongst programs, and space-heating direct load control which showed to be the strongest candidate for GeoDR efforts in the residential, small commercial and industrial spaces.

Staff's goal is to ensure that all viable NPA solutions are run through the same cost-effectiveness evaluation, and for the Company to transparently select the best option against the pipeline solution. Staff expects the Company to incorporate a broader set of feasible NPA tools including assessing whether additional GeoDSM measures, targeted or beneficial electrification, or other demand-side or hybrid solutions may be cost-effective in delaying or avoiding system reinforcements. Staff expects the Company to advance this conversation in its next IRP with expanded understanding of what is needed to enable new NPA solutions, identification of key bottlenecks and challenges and discussions about trade-offs with the Staff and stakeholders.

Staff expectation for modeling in the next IRP:

2. *In the Technical Working Group process, the Company should revisit the NPA solution set with stakeholders. The Company should identify any technical, cost, or implementation considerations associated with beneficial electrification or pricing-based DR, drawing on existing studies and ongoing joint system planning work.*

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38 TWG No. 8.

39 The Potential for Gas Demand Response in the NW Natural Service Territory, the Brattle Group, December 2019.

Joint System Planning & Electrification

NW Natural's IRP proactively identified the core elements it believes are needed for future Joint System Planning (JSP), including shared data, aligned IRP timelines, common decarbonization assumptions, consistent reliability standards, and planning flexibility. The Company emphasizes a "step-by-step, learning-by-doing" approach and notes that effective JSP will require more granular electric-system data, such as substation capacity, electrification assumptions, GIS overlap, and coordinated scenario frameworks.

Stakeholders and Staff generally agreed that coordinated gas-electric planning is essential for Oregon's long-term decarbonization, affordability, and reliability goals, noting that independent IRPs cannot fully capture winter peak risk, cost interactions, or cross-system benefits of hybrid heating, DSM, and NPAs. Some parties recommended that NW Natural revisit and update its ICF electrification study with shared data and improved assumptions. NW Natural declined to redo the study independently, arguing that systemwide planning will naturally incorporate updated inputs and avoid duplication. Staff agreed a standalone refresh may not be the right path but also supported reexamining costs and benefits as part of broader joint planning. NWN expressed willingness to continue engaging in the ICF analysis during Technical Working Groups for its next IRP.

External best-practice studies, such as recent work by Lawrence Berkeley National Laboratory (LBNL) and the European Network of Transmission System Operators for Electricity and Gas (ENTSO-E/G), recommend beginning JSP with common assumptions, aligned planning schedules, standardized data disclosure, and structured utility collaboration.[40] LBNL highlights four hallmarks of good integrated planning: efficient cross-utility communication; aligned forecasts and modeling inputs; reformed analytical structures capable of jointly evaluating gas and electric system costs; and outputs tailored to joint procurements, cost allocation, and affordability programs. The ENTSO scenario process similarly stresses jointly developed, transparent scenarios; coordinated data collection; and shared modeling frameworks to ensure consistent assessment of electricity and gas infrastructure needs.

Staff appreciates all parties' leadership in working to move the JSP conversation forward in this IRP proceeding JSP by nature requires a broader and more representative venue. Progress on JSP is a shared goal expressed by NW Natural and advocates in the UM 2417 EO 25-29 work planning investigation. Staff believes that

[40] LeBel, Mark, et al. Opportunities for Integrating Electric and Gas Planning. Lawrence Berkeley National Laboratory, 23 Dec. 2024. ETA-2024-12, https://eta-publications.lbl.gov/sites/default/files/2024-12/opportunity_integrate_electric_gas_planning_20241223_final.pdf.

discussion of high impact regulatory activities to make progress on JSP planning assumptions and standards is well suited to UM 2417.

NW Natural reiterates its support for fit-for-purpose, non-duplicative joint studies while a broader framework is being established. Staff invites stakeholders and NW Natural to continue dialogue on these joint system planning goals in the LC 86 context in the meantime.

Overall, Staff supports action item A-21, for the Company to find opportunities for gas and electric joint system planning to achieve emission reduction goals as affordably and reliably as possible. At this time Staff refrains from making any explicit recommendations on joint utility planning with the intent of coordinating lessons learned in LC 86 with the discussions taking place in response to recent executive orders in UM 2417. If the Commission determines that joint utility planning will be part of work plan responsive to EO 25-29, Staff may revisit next steps that NW Natural could reasonably take to advance joint utility planning with the electric IOUs with which it shares territories.

System-wide Near-Term Equity Actions

B-32	Increase community awareness of/involvement in energy planning and utility programs by partnering with community partners and service providers (including peer/local utilities) to bring forward an annual resource fair centered on energy planning topics and resources.

The 2025 IRP is the first to include a chapter devoted to equity considerations, highlighting the Company's commitment to ensuring low-income customers have the resources they needs to afford their energy bills. This represents a meaningful step toward integrating affordability and equitable participation into the Company's long-term planning. Staff appreciates the perspective that the IRP focuses on what NW Natural "can directly impact, including enhancing public participation, integrating diverse perspectives into our planning processes, and a vehicle for raising awareness of the Company's energy assistance programs."[41] The Company's 2025 IRP reasonably focuses on areas NW Natural can directly influence, which includes enhancing public participation, integrating diverse perspectives, and increasing awareness of the Company's energy assistance programs.

In Chapter 3, NW Natural outlines several actions designed to strengthen inclusive, informed, and meaningful public engagement in the 2025 IRP cycle. Staff recognizes the breadth of tools and enhancements employed, including general accessibility improvements (e.g., plain language reviews, translation upon request), a dedicated IRP

[41] 2025 NWN IRP, pg. 1-26.

webpage, public feedback forms, Technical Working Groups (TWGs), and public engagement webinars. Staff believes that these tools demonstrate increased intentionality in designing processes that broaden access and reduce barriers to participation.

Staff notes that this IRP is the first cycle in which the Company formally incorporated feedback from the Community and Equity Advisory Group (CEAG). Through the CEAG, NW Natural included perspectives from communities that are often underrepresented in utility proceedings. Staff reflects on the recommendations brought forward during Opening Comments and further refined in Round 2 Comments by the Joint Advocates, which requested:

- Providing topic overviews in accessible language (high-school reading level or below).
- Sending preparatory materials (e.g., workbooks) at least one week prior to meetings.
- Offering "101-level" learning sessions between quarterly CEAG meetings
- Working more closely with translators to ensure accurate transcreation of technical terminology.

In the Company's Reply Comments, NW Natural's explains its use of plain-language materials, pre-meeting information packets, paid translation/interpretation services upon request, and compensation for CEAG members' time.

In drafting Round 2 Staff Comments, Staff considered recommending NW Natural establish general CEAG meeting guidelines consistent with the Joint Advocates' proposals. After further clarification in discussions with the Company, Staff believes NW Natural is already providing adequate support consistent with those guidelines, particularly through pre-meeting materials, the availability of translation services, and the ongoing refinement of meeting design and facilitation.

With respect to the Joint Advocates' request that NW Natural work directly with translators to pre-educate them on complex terminology, Staff agrees with the Company that requiring such a commitment on an ongoing basis may not be practical. Staff encourages the Company to engage with the CEAG to determine its appetite for such additional services. Staff recommends that the Company continue its current approach to make reasonable efforts to clarify terminology for interpreters and translators when translation accuracy issues arise or when a need is specifically identified.

Conclusion

Staff finds that Northwest Natural's 2025 IRP demonstrates meaningful progress in long-term planning, improved modeling, and expanded consideration of demand-side

and compliance resources. The Company has taken steps to incorporate stakeholder feedback, evaluate joint system planning needs, and identify a range of low-regrets actions suited to a period of declining load and evolving policy requirements. While Staff acknowledges the uncertainty surrounding electrification, alternative fuels, and CPP compliance trajectories, the Company's proposed long-term strategy is a reasonable foundation for meeting reliability and emissions-reduction obligations in a cost-effective and flexible manner.

At the same time, Staff identifies several areas where additional action is needed to lower long-term risk and better align the Company's planning with emerging opportunities and state policy direction. These include expanding transport customer energy efficiency, accelerating hybrid heating measure development in collaboration with Energy Trust and electric utilities, and more fully exploring the potential for NPAs, beneficial electrification, and coordinated gas–electric planning. Staff's recommended conditions for the near-term Action Plan are designed to strengthen these workstreams and ensure they are reflected in the Company's next IRP.

PROPOSED COMMISSION MOTION:

1. Acknowledge Northwest Natural's 2025 Integrated Resource Plan Long-term Resource Strategy.

2. Acknowledge of the Company's 2025 IRP Near-term Action Plan, subject to the following conditions:

   Recommendation 1: Work with Energy Trust to file updated acquisition targets for the action plan that capture all cost-effective transport customer efficiency across Standard, Custom, and Strategic Energy Management programs 90 days after IRP acknowledgement.

   Recommendation 2: Work with Energy Trust and electric utilities to develop a hybrid heating measure that encourages customers to install heat pumps instead of central air conditioning by January 2027. Provide Staff with an update of measure development by December 2026.

   Recommendation 3: Reflect the results of Energy Trust's evaluation of the Company's hybrid heating measures and forecasts in the next IRP's analysis.

1. Direct the Company to do the following while developing the next IRP:

Recommendation 4: Host at least one workshop addressing their load forecast and demand scenario approach with Staff and Stakeholders. At the workshop, the Company should explain how the impact of the LEA phase-out will be meaningfully considered and make adjustments to the load forecast approach as appropriate based on feedback.

Recommendation 5: Work with Staff and stakeholders to more comprehensively consider multiple factors that may drive demand scenario variations. Examples may include the LEA phase-out, electrification scenarios, and gas demand scenarios.

Recommendation 6: Work with Energy Trust of Oregon to improve visibility into fuel-switching trends, including how Energy Trust's incentives, market transformation efforts, and heat-pump adoption programs affect NWN's load forecast.

Appendix: Staff Expectations for improved modeling in the next IRP:

1. *In the next IRP, the Company must propose clear and measurable targets for participation in and peak-hour reductions from its interruptible rate program.*

2. *In the Technical Working Group process, the Company should revisit the NPA solution set with stakeholders. The Company should identify any technical, cost, or implementation considerations associated with beneficial electrification or pricing-based DR, drawing on existing studies and ongoing joint system planning work.*