Grant PUD

INTEGRATED RESOURCE PLAN 2026

POWERING OUR WAY OF LIFE

RESOLUTION 9999 | EXHIBIT A | AUGUST 28, 2026

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How to read this document:

This Integrated Resource Plan (IRP) document is organized to serve different readers with differing levels of interest. The first section, "What We Recommend", is designed to stand on its own. A reader who goes no further will still have a complete picture of Grant PUD's current resource outlook, the key challenges the utility is facing over the planning horizon, and the recommendations this plan makes to address them. Readers who want to more fully understand the analysis and evidence behind the recommendations will find that in Section 2, "What Informed This Plan." Section 2 walks through the forecasting, analysis, and planning that shaped our recommendations. The third section, "What Happens Next", describes the implementation plan, decision points, and commitments that carry this plan forward into action. Throughout the document, readers will find links that connect specific topics to relevant portions of Section 2 and to the Reference Library and Technical Appendices, where detailed data and methodology discussion are available for those that want a deeper dive. There is no wrong way to read this document. Start where your interest takes you and follow the links where you want more.

1. What We Recommend

Grant County PUD serves our customers in a region rich with hydropower resources, shaping how we approach long range planning. While the Priest Rapids Project remains the foundation of our resource portfolio, the energy landscape in the Northwest, and in Grant County, is changing in ways that require careful attention. Key concerns addressed in this plan are:

- Grant PUD customer demand has increased 30% over the last decade; Both local and regional load are expected to grow by an additional 30% over the coming decade, requiring infrastructure additions with long lead times
- Load growth is expected to be significant, but the pace and scale of that growth is uncertain, leading to a wide range of plausible load futures
- The Clean Energy Transformation Act (CETA) requires 80% clean energy supply by 2030 and 100% by 2045; resources added to serve growing load must be consistent with these targets
- Grant PUD needs to add capacity to demonstrate resource adequacy under Western Resource Adequacy Program (WRAP); we're working to add that capacity at a time when regional supply is tightening and resource development struggles to keep pace with demand growth
- Beginning in 2028, participation in Markets+ will change how we buy, sell, and price wholesale power; currently the exact impact of those changes is unclear

This document lays out how Grant PUD will address these concerns. It identifies the uncertainties and risks we're tracking and how our planning approach addresses them. Our intent is to give customers and community partners a clear picture of where we're headed and how we plan to get there.

The planning framework used for the 2026 IRP builds directly on the tools and methods applied in the 2024 plan, with targeted refinements intended to improve transparency and decision-making relevance. Key elements of the planning approach include:

- Capacity expansion, dispatch, and loss of load modeling to identify least-cost, least risk portfolios under defined constraints
- Stochastic simulation of future conditions, capturing variability in hydrology, load, weather, and market prices
- Evaluation of resource adequacy consistent with WRAP policy, and additional loss of load analysis where applicable
- Integration of policy and regulatory requirements with consideration of compliance risk and implementation uncertainty
- Portfolio-level financial risk measures used to evaluate exposure to unfavorable outcomes

Results are decision-support information, not forecasts and the modeling is used to compare strategies, identify vulnerabilities, and understand where assumptions matter most.

1.1. Preferred Portfolio Additions

We recommend adding 240 MW (megawatts) of new battery storage capable of delivering four hours of continuous power and 860 MW of new solar over the 20-year planning period. These were selected for their low acquisition cost relative to other technologies and their feasibility to be sited in-county or near-county. Storage is recommended for its year-round capacity contribution to WRAP requirements, dispatch flexibility, ability to integrate intermittent resources, relative ease in siting, and minimal land use. Solar is recommended for its clean energy and summer capacity contribution. Both technologies are scalable, providing flexibility to stage additions as customer needs become more certain.

Figure 1 shows the preferred Grant PUD resource acquisition timeline based on our analysis. Whether these resources should be added through purchase agreements or owned by Grant PUD will be decided during the acquisition process. All selected resources are currently

commercially available and chosen as risk-adjusted least-cost alternatives through evaluation of projected cost distributions, value at risk, reliability metrics, and compliance performance.

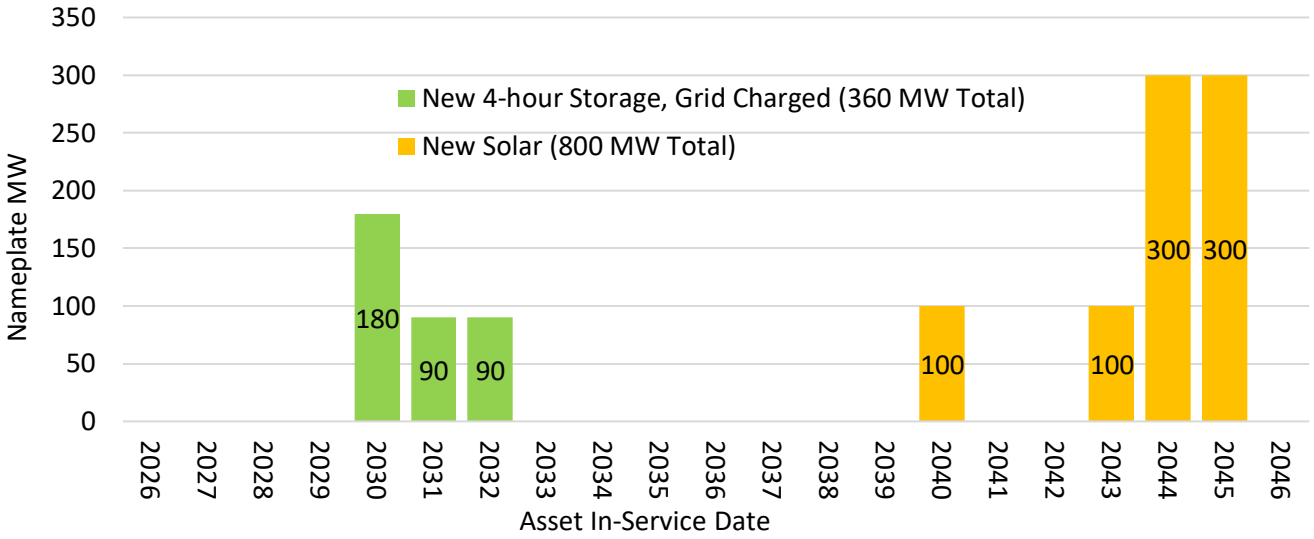

Figure 1 Recommended Acquisition Plan, by technology type, by in service date, nameplate MW

In addition to recommendations shown in **Figure 1**, Grant PUD has signed contracts for Quincy Solar (120 MW) and Royal Slope Solar (260 MW) and Storage (260 MW, 4-hour duration) starting in 2027 and 2028 respectively. These additions were indicated by the 2024 IRP and procured through a formal request for proposal process. For more information on Grant PUD's recent portfolio additions see Section **2.1.**

We will re-evaluate these recommendations in future IRP cycles and during acquisition activities. Technical advancements, cost decreases, or changes to Washington clean energy policy can change the type of technology recommended. Changes in customer energy requirements or to WRAP business practices can alter the size or the timing of additions.

1.2. Other Recommended Resources

Beyond solar and storage, our recommended portfolio deliberately incorporates utilization of wholesale markets, renewable energy credits, and conservation to manage cost, risk, and compliance.

Wholesale Market

It's neither practical nor cost effective for Grant PUD to self-supply energy for every hour. Load variability, hydrologic conditions, and renewable intermittency create times when market energy is the most efficient source of supply. While asset additions reduce exposure to potentially volatile market conditions and are necessary to meet CETA and WRAP requirements, wholesale

markets are a planned part of serving load and more economical than overbuilding long-term assets.

Renewable Energy Credits

Grant County PUD is committed to doing our part to meet Washington long-term decarbonization goals. CETA allows utilities to use renewable energy credits (RECs) as a legislated compliance tool up to 2045. This plan recommends REC use as a deliberate risk management tool between 2030 and 2042. Doing so results in prudent cost management, preserves flexibility under load and market uncertainty, and helps avoid locking in long-lived acquisition decisions that may not align with future system needs. The recommended portfolio additions are structured such that reliance on RECs will decline over time and portfolio assets will be sufficient to meet 100% clean energy targets in 2045.

Conservation and Efficiency

Conservation and efficiency reduce peak demand, lower energy and compliance needs, and help defer infrastructure investments. An independent assessment by Lighthouse Energy Consulting identified 73.84 aMW (average megawatts) of cost-effective conservation potential over the 20-year planning horizon. In November 2025, Grant PUD Commissioners approved a ten-year conservation potential of 37.18 aMW and a biennial achievement target of 8.83 aMW. These approved conservation amounts are part of this plan's recommended portfolio.

For more information on conservation and efficiency, see Section **2.7**. For a complete look at the 2025 Conservation Potential Assessment see the **Lighthouse Grant PUD 2025 CPA Final Report**.

1.3. Managing Regional Correlation Risks

A look at other regional IRPs, and the Pacific Northwest Utilities Conference Committee's (PNUCC) 2025 Northwest Regional Forecast, shows that many neighboring utilities are also planning solar and storage additions. Even if not all regionally planned projects are built, these stated plans point to regional correlation risk for our solar and storage recommendation.

As regional solar and storage capacity increases, diversity benefits that come from having resources spread across different geographies and technologies decline. For solar, mid-day energy surpluses become regional, mid-day energy prices fall, and curtailment risk increases. To mitigate these risks, we recommend sizing solar additions conservatively, timing projects in phases or using staged commitments to leave opportunity for potential plan changes and giving preference to projects with secured interconnection and transmission availability during procurement.

When many regional utilities rely on batteries, all storage may charge during the same low-price windows, and discharge during the same demand peaks. Most installed and commercially available storage is of 4-hour duration and if a regional energy event lasts longer than 4 hours those resources offer no additional benefit. As the region adds more storage, the reliability and WRAP capacity value of all storage declines. This creates a risk that the capacity values we use when planning today will be lower by the time new projects reach commercial operation and that they continue to decline over the life of projects. Our analysis includes consideration of significant storage capacity degradation.

To further mitigate correlation risk, we recommend adding storage in phased commitments to leave ability to implement plan changes if needed, making fuller use of our existing hydro flexibility, and considering diversifying storage additions to longer duration solutions when technological advances reduce the cost of those resources.

1.4. Resources Considered

Though only solar and storage acquisitions are recommended at this time, this IRP considered nine resource technology types with potential sites across Grant County, Washington State, Oregon, Idaho, Montana, and Nevada. Locations were chosen based on their resource quality and through a deliverability screening. **Table 1** below provides a summary of the technologies evaluated. For more detail see Section **2.2** or click on the resource names in the table to jump to the related section.

Table 1 Resources Considered for 2026 Resource Plan, by Technology Type

Resource	Relative Cost	Reliability	Resource Adequacy Value	Carbon Emissions	Land Usage	Dispatch-able	Selected
Solar Photovoltaic (PV)	Low	Weather-dependent	Low to Medium	None	Medium to High	No	✓ **Selected**
Onshore Wind	Low-Med	Weather-dependent	Low	None	High	No	**Not Selected**
4-hr Battery Energy Storage	Low	Medium	Medium	None	Low	Yes	✓ **Selected**
100-hr Battery Energy Storage	High	Medium	Medium	None	Low to Medium	Yes	**Not Selected**

Natural Gas Combined Cycle	Med-High	High	High	Significant	Low	Yes	**Not Selected**
Natural Gas Combustion Turbine	Med-High	High	High	Significant	Low	Yes	**Not Selected**
Natural Gas Linear Generator	High	High	High	Significant	Very Low	Yes	**Not Selected**
Pumped Storage Hydropower	High	High	Medium to High	None	Very High	Yes	**Not Selected**
Small Modular Reactors (SMR)	Very High	Very High	High	None	Low	Yes	**Not Selected**

1.5. Load Forecast Uncertainty

Load uncertainty is a primary driver of risk in this plan. There is a wide range of plausible load-futures and different futures reshape the plan. To sample potential solutions over a range of load trajectories, several load scenarios were modeled (see **Figure 2**.) In each load-future examined, stochastic modeling incorporated weather-driven load variability. The reference case is our current expectation of future load.

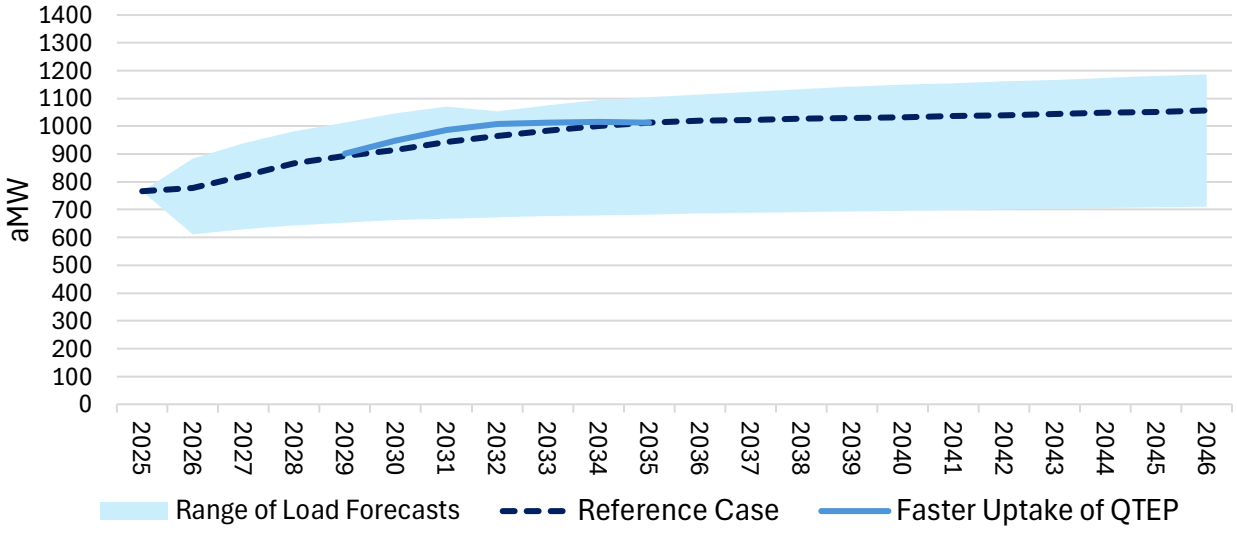

Figure 2 Range of Load Forecasts Considered in 2026 IRP Analysis, 2027-2046, aMW

Uncertainty in the load forecast is primarily driven by large industrial customers, the fastest-growing customer class in Grant County. Energy use projections that these customers provide are often subject to substantial revision. Realization of industrial load forecasts depends on financing, permitting, construction timelines, supply chain conditions, end-market demand, and broader economic conditions. Not all demand currently in the interconnection queue will ultimately materialize and even load that does may not reach its initially forecast levels.

Another source of load uncertainty reflected in forecasts is technological change. Energy efficiency, adoption of distributed generation, electrification, and evolving end-use technologies may alter load trajectories in ways difficult to predict.

Together, these factors create a wide range of potential load outcomes to be considered. In our recommendations, accommodations are made for near-term uncertainty, including uncertainty around the rate of customer uptake of the Quincy Transmission Expansion Project capacity (QTEP). While QTEP uptake affects only timing of load requirements, not the eventual magnitude, changes in near-term demand have measurable impact on capacity resources required for WRAP. We recommend acquisition of battery storage capacity earlier than indicated by a more measured uptake of QTEP capacity to reduce risk of under-compliance with WRAP.

To learn more about QTEP, the multi-year series of high-voltage transmission and switchyard upgrades expanding transmission capacity, reliability, and flexibility in the Quincy area, see Section **2.7.4**. To learn more about load forecast assumptions, see Section **2.4.2**.

1.6. Meeting Clean Energy Transformation Act (CETA) Requirements

Our recommended portfolio meets CETA requirements of at least 80% of its load being met by renewable and non-emitting resources ("clean energy") beginning in 2030 and 100% clean energy by 2045. **Figure 3** below illustrates that the recommended portfolio meets those requirements not only for our expected reference load but also over most of the range of plausible load futures identified.

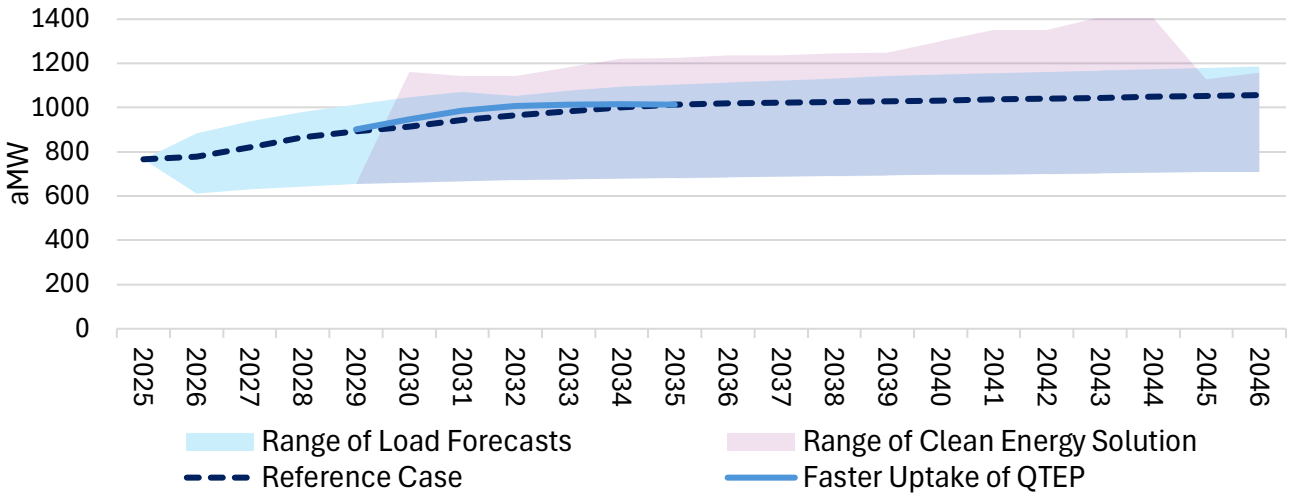

Figure 3 Recommended Portfolio Meets CETA Requirements Across a Broad Range of Load Futures, 2025 -2046 , aMW

Grant PUD is currently positioned to meet clean energy obligations by retaining Priest Rapids Project energy instead of selling it via long-term energy sale agreements, and with the additions of Quincy Solar, Royal Slope Solar, and the Bonneville Power Administration (BPA) Provider of Choice contract. Additional clean energy resources must be added later in the planning period to enable the transition between 80% clean energy supply and 100%. Clean energy or RECs produced by the portfolio that exceed customer needs may be sold, and revenues used to decrease customer net costs.

For more information on CETA and clean energy policy, see Section **2.13**

1.7. Meeting Resource Adequacy Requirements

As load grows, so does the portfolio's need to add capacity resources to meet load peak demands. Near-term portfolio additions are needed to provide sufficient firm capacity for participation in WRAP. **Figure 4** below illustrates the recommended portfolio's ability to meet monthly capacity requirements for WRAP over a range of load expectations.

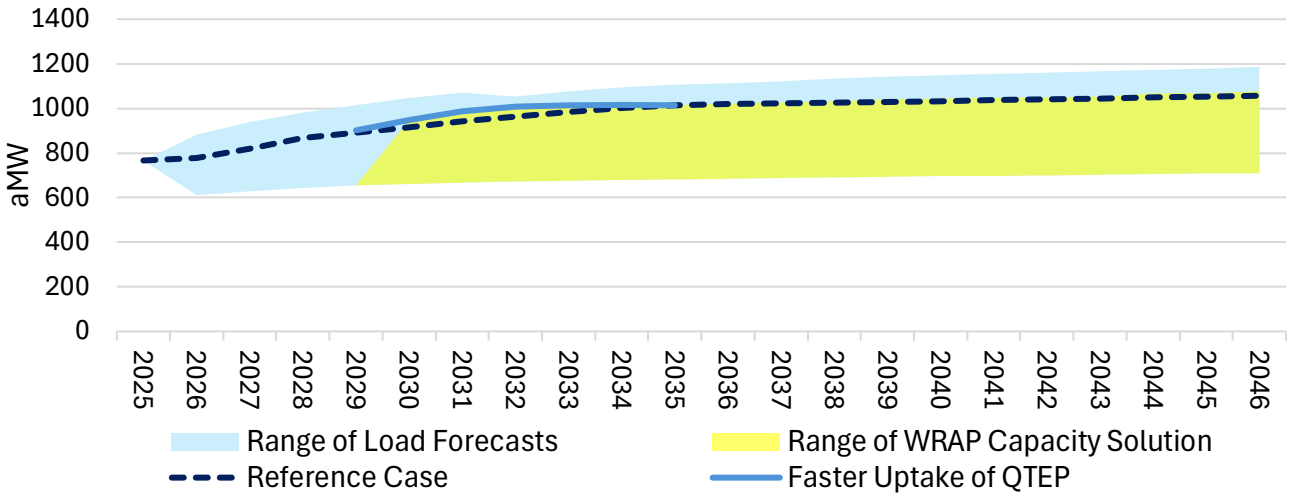

Figure 4 Recommended Portfolio Meets WRAP Requirements Across a Broad Range of Load Futures, 2025 -2046 , aMW

WRAP requirements are heavily dependent on peak load and program evaluation of resource capacity contributions. As load forecasts become more certain, and WRAP requirement metrics evolve, capacity needs will be monitored on an ongoing basis.

For more information on WRAP, and reliability evaluations in addition to program requirements, see Section **2.4.**

1.8. Transmission and Deliverability

Reliable service depends not only on having adequate generation capacity but on the ability to deliver energy to customers when and where they need it.

Regional interconnection delays and constraints, and potential for transmission congestion are increasing as utilities, developers, and large customers develop new generation and load. Interconnection queue backlogs and long lead-time infrastructure upgrades result in uncertainty when new resources will be available to serve load. Deliverability risks are particularly relevant during winter peak periods and high-load futures when reliance on imports or market access can coincide with region-wide constraints. These conditions are considered in forming plan recommendations, though transmission and distribution systems were not explicitly modeled as part of the IRP.

Resources that can reliably serve Grant County customers without overdependence on potentially constrained regional transmission paths reduce our exposure to deliverability risk. Where options are otherwise comparable, siting new generation resources in Grant County offers value. Infrastructure investments, like QTEP, improve local deliverability and system strength complement our generation acquisition decisions by reducing that same exposure.

Potential for renewable curtailment and its effect on CETA compliance and overall portfolio cost was also examined in plan analysis. This assessment suggests that though some renewable curtailment may be expected, it does not change our recommendation to pursue solar acquisitions as we approach mandated deadlines for 100% clean energy.

For more on this topic see Section **2.6.5**.

1.9. New Market Considerations

Planning inputs tied to our upcoming participation in Markets+ were developed under uncertainty. Nodal locational marginal pricing (LMP) introduces the potential for location-specific prices to diverge from the regional average. But the absence of market day-ahead commitment history and transmission congestion factors means we had to rely on the best available information and use professional judgement to form planning assumptions. To continue to plan and prepare under this uncertainty we recommend:

- Continuing engagement with Markets+ through workgroup participation to both influence market design rules and to understand their impact on Grant PUD planning and operations
- Investing in staff competency development for market operations
- Developing an initial offer strategy for our portfolio assets, with emphasis on hydro operational constraints
- Sizing near-term resource additions prudently and timing these projects in phases to preserve options during the market transition

To learn more about Markets+ and our analysis of its impact on Grant PUD operations and service, see Section **2.9**

1.10. Policy Impacts

This resource plan is fundamentally shaped by the combination of clean energy mandates, federal policy, and institutional constraints. These forces shape which resources are eligible, how they are valued, when investments must happen, and affect risk, cost exposure, and flexibility.

Markets+ introduces programmatical requirements governing price formation, resource use, and the valuation of flexibility. The full impact of market participation won't be known until operational experience is established.

WRAP sets monthly capacity obligations that require carefully timed capacity additions. These requirements are currently the binding constraint in our resource acquisition recommendations.

While we're taking steps to incorporate reliability planning outside of WRAP, WRAP metrics are an important hurdle we must clear to be able to enjoy the benefits of regional capacity sharing during times of system stress.

CETA and the Energy Independence Act set binding clean energy and conservation requirements that limit resource eligibility and timing. The Climate Commitment Act adds explicit, significant, but uncertain carbon cost and exposes emitting assets, and the offtakers of those assets, to increased and potentially volatile costs. Under Washington's current statutory framework, CO2 emitting resources are strongly disfavored and face stranded-asset risk because CO2 emitting resources will no longer be able to serve retail customers after 2045.

The 2022 Inflation Reduction Act provided incentives that lowered the effective cost of clean generating resources. The subsequent reversal of those incentives by Federal actions, including through the One Big Beautiful Bill, presents an example of the policy risk planners face. We are recommending long-lived decisions in an environment where the rules can change.

The impact of these policies, along with the knowledge that any policy can change or evolve, is addressed in this plan through use of conservative assumptions, recommendations for phased and prudently sized resource additions, attention to deliverability, and continued engagement in market and program governance. Through thoughtful policy compliance while avoiding overcommitment to any single policy outcome, our recommendations support stable and predictable rates. Through leaving room in our plans to accommodate change, the likelihood that customers will bear the cost of policy-driven changes is reduced and future planners inherit options.

For a more complete look at policy impacts see Section **2.6** Carbon Policy, Section **2.12** Markets+, Section **2.15** Policy Impacts,

Section 1 has laid out plan recommendations and the key risks and uncertainties shaping those recommendations. Section **2** provides the analytical foundation behind these recommendations including how load futures were developed and stress-tested, how resources were screened and evaluated, and how WRAP, CETA, market, and carbon policy requirements shaped the preferred portfolio. Readers who want to understand the evidence and methods behind what is recommended here will find that detail there.