

# MEMO



**DATE:** September 13, 2021

**TO:** Senate Bill 589 Advisory Committee

**FROM:** Commissioner Letha Tawney

**SUBJECT:** Senate Bill 589 Scoping Questions

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As a customer protection agency charged with ensuring just and reasonable rates and least-cost, least-risk implementation of climate and clean energy policies, the PUC's focus is on how deeper regional cooperation can deliver benefits to Oregon customers and limit risks or harms now and in the future. This was our focus in the early 2000's when RTOs first formed and continues today in our regional leadership in the California ISO's Western Energy Imbalance Market, the NW Power Pool's Western Resource Adequacy Program, and the various forums—formal or informal, regional or national—where regionalization is regularly discussed. We are highly aware of how market constructs and RTOs intersect with a rapidly changing energy sector and the legislature's mandate to decarbonize the electricity sector. Further, our findings in the SB 978 report reflect our commitment to promote regional market development to enable efficient wholesale competition and regional resource diversity with the goal of lowering costs and risks to customers.<sup>1</sup> In our response to ODOE's survey questions, we provide a summary of the benefits to customers and the risks or tradeoffs that RTOs present for Oregon customers and policy makers, through our customer protection lens.

## **Solutions and Benefits an RTO Provides**

The research materials ODOE identified focused on enquiring about projected RTO benefits. We agree with key areas in which ODOE identified various RTO benefits, highlighted below:

- **More efficient dispatch of resources:** An RTO would provide a mechanism for greater efficiency in dispatching resources, particularly in light of the complexity of integrating substantial intermittent resources effectively. Because an RTO would offer coordinated transmission operation across a wide geographic area, this would broaden the scope of accessible resources for RTO participants and improve the ability to transmit power across various Balancing Authority Areas. Overall, these would be positive outcomes of an RTO.
- **Deterring capacity overbuild:** Because a regional footprint would broaden the diversity of available resources, this would theoretically increase the Effective Load Carrying Capability (ELCC) of each resource. A broader pool of resources would minimize the risk of capacity overbuild regionwide. Importantly, similar efficiencies could also be obtained through a more efficient use of transmission. A design benefit of the RTO would be the elimination of the bilateral contract path approach for transmission

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<sup>1</sup> See the OPUC's Legislative Report, [SB 978: Actively Adapting to the Changing Electricity Sector](#).

allocation, and the introduction of a central optimized and transparent clearing house. ODOE's study should consider focusing on this particular, tangible benefit in its report.

- **Other economic benefits:** Related to the issue of broader diversity is also the enhanced market access for customers. An expected benefit of RTO participation should be improved overall costs as a result of increased sales, the opportunity to purchase lower cost energy, and potential cost savings due to transmission efficiencies. To the extent these benefits are passed onto retail customers, this can be a positive outcome of an RTO.

### **Obstacles an RTO May Not Resolve**

While we acknowledge there is support for enhanced economics and efficiencies as a result of thoughtful RTO design, we caution that the value of an RTO, and the problems it will solve, should be tempered by challenges that have emerged in other parts of the country. While it is important to investigate its advantages, an RTO is not a silver bullet. In addition to exploring RTO benefits, ODOE's report should also review costs, risks and other challenges for a full account of RTO involvement. Some of these risks can be mitigated through careful and balanced RTO governance and careful market design, but some are inherent to greater regional cooperation.

Below are some challenges that may not be, or have not been, solved by an RTO.

- **Investment signals:** RTOs have yet to create a functional market design that incentivizes reliable capacity buildout. Markets with depressed energy prices create the “missing money” problem, where low market prices fail to incentivize long-term resource builds. Across the country, capacity markets and other resource adequacy mechanisms are still trying to solve this problem. We note that our vertically integrated utilities, through 20-year IRPs that plan for capacity and competitive procurements to build the capacity, do largely resolve this issue. The resource adequacy construct being considered by the Northwest Power Pool may improve on the existing single-utility approach in terms of both reliability and efficiency. However, alone, markets do not drive the addition of new generating resources.
- **GHG reductions:** We caution against the assumption that an RTO would automatically deeply reduce GHGs.<sup>2</sup> An RTO may not end up accelerating renewable adoption, and by extension, GHG reductions. An RTO will have to effectively internalize many different states' GHG tracking mechanisms, limitations, or pricing policies to truly alter which resources are dispatched and reduce emissions. For example, studies have documented that even with security constrained, economic dispatch, some thermal plant operators have other economic incentives, such as minimum take contracts and long ramp times, that lead them to bid below their marginal fuel cost. This allows them to dispatch more often than the marginal fuel cost alone would dictate.<sup>3</sup> While an RTO may improve transparency into this bidding behavior, it would not alter the thermal plants' overall dispatch where out-of-market incentives exist.
- **State policy goals:** Eastern states have struggled to implement policies preferencing zero carbon technologies when in conflict with their regional RTO rules or the Federal Energy Regulatory Commission (FERC) decisions. With an RTO, states give up some jurisdiction on issues pertaining to resource adequacy and reserve margins, incentive pricing and other state policy goals. This has led to state apprehension about over-

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<sup>2</sup> For example, see the [State-Led Market Options Study](#) for an analysis of how RTOs impact GHG emissions.

<sup>3</sup> See Utility Dive. [MISO integrated utilities lost \\$492M from 2016-2019 via uneconomic coal dispatch.](#)

procurement of resources, resource selection or inefficient integration of intermittent renewables.

- **Resilience:** Resource sharing has significant positive implications for weathering extreme demand events or significant outages such as the 2021 summer heat wave, or the grid's ability to manage, such as when the California-Oregon Intertie went offline as the Bootleg fire burned through. However, RTOs have almost no nexus with distribution-level outages. For example, other variables that contribute to wildfires, such as lagging vegetation management, are regulated at the state level and would not be overseen by an RTO. In addition, state policy decisions to preference local generating resources with or without resilience additions can be supported *or* undermined by an RTO market and resource adequacy rules.
- **Cost allocation:** There remain contentious cost allocation arguments about transmission in RTOs. For example, transmission in California is about three times the cost of transmission in Oregon—a differential that creates cost allocation challenges should the transmission systems be consolidated in an RTO. Clogged interconnection queues are a significant issue in RTOs, and actions by states or utilities can still artificially raise the market clearing price (e.g., coal dispatching in MISO), among others.

### **Overarching Issues**

This study, by the nature of the timeline and mandate, is necessarily very summary and broad. It provides an opportunity to describe the potential benefits and challenges RTO participation could create for Oregon customers, developers and other stakeholders, but these findings are highly contingent on the final structure of any market that eventually emerges. It is not the equivalent of the type of cost-benefit analysis a utility regulated by the PUC will perform and present for stakeholder review through an IRP, rate case, or some other means in order to demonstrate the benefits of an investment to customers. There is a longstanding PUC review process before costs or risks are shifted to utility customers that helps to ensure those customers interests are protected. A major decision such as RTO engagement would similarly include a utility-specific robust analysis supporting any assertions about benefits. These include claims about cost savings (e.g., any bill savings estimates or claims that an RTO would avoid building duplicative transmission as compared to the status quo), time savings (e.g., the assertion that transmission planning under an RTO would save time vs. the status quo), and other tangential assumptions (e.g., that there would still be reduced water usage due to reduced thermal dispatch).

Further, in considering the benefits of an RTO and their challenges, a key consideration in the ODOE study should be an exploration of alternative mechanisms—that is, that there may not be a need for a “full” RTO to achieve regional efficiency, reduced capacity investments, reduced curtailments or economic benefits. Alternative institutional designs, such as a market dispatch footprint built on the CAISO Western EIM and a resource adequacy model built on the NW Power Pool process, complemented by existing regional transmission planning organizations, may provide the bulk of the benefits for Oregon customers more quickly, at lower cost, and allow the region to select only the most important functions.

Related to the question of RTO participation is its design. The state commissions should have a strong, ongoing presence and oversight in the governance of any regional transmission and market design to ensure that protections are in place for retail customers, that state policies have the highest chance of successful implementation and that the states are meaningfully engaged.

## **Conclusion**

We are fortunate in Oregon to be drawing on more than two decades of literature on the benefits and limitations of RTOs. While a market can allow for better utilization of the generation fleet, it does not solve a range of other issues, and it may result in simply relocating litigious matters from one venue to another. The final report should highlight that market design and governance can strongly mitigate *or* exacerbate these challenges, their impact on customers and state policy. The final report should also reflect the need for supportable analysis in contemplating benefits.

We appreciate the opportunity to provide feedback and look forward to partnering with ODOE in the final product.