

Objective:

To gather and synthesize the range of perspectives on the benefits, costs, opportunities, challenges, and risks of Regional Transmission Organization formation that exist among a diverse range of Oregon stakeholders to inform the State Legislature and other interested parties.

Instructions for Responding to Scoping Questions:

To support your participation in this effort, we are providing background materials on this topic (e.g., What is an RTO? How do they operate?) and other related issues on our [website](#). In addition, we have also created the following [one-pager](#) that summarizes this effort, which includes a timeline of key dates.

Your answers to the questions that follow will play a critical role in helping the state better understand stakeholder perspectives on key issues related to RTO formation. On the pages ahead, you will find three categories of questions with several topics per category.

- **Foundational Questions:**
 - Legal barriers
 - Oregon-specific net benefits
 - Oregon retail customers
 - Overarching principles

- **Technical Questions:**
 - Transmission rates
 - Transmission planning and operation
 - Renewables
 - Environmental impacts
 - Climate resilience

- **Governance and Design:**
 - Governance
 - Market design optionality

Given the technical nature of some of these issues, however, and in recognition that some stakeholders have more data and analysis to address some of these questions than others, we expect that some stakeholders will not answer every question. Please provide as much feedback and input as you can. We anticipate that, in many cases, responses to these questions will be quite long and detailed, which may make it challenging to submit some answers via the online web-based submission form. Please do your best, but please reach out if you have any challenges submitting your answers via the online portal.

In order to participate in the meetings of the Oregon RTO Advisory Committee (scheduled for September 20 and October 6), we ask that you **please submit your written feedback to these questions by September 13. Responses should be submitted via the SB 589 online comment portal:** <https://odoe.powerappsportals.us/SB589/>

If you have any questions or encounter any challenges, please contact Adam Schultz (adam.schultz@energy.oregon.gov).

Foundational Questions:

- (1) **Legal Barriers:** Oregon’s retail electricity customers are served by a complex arrangement of private and public distribution utilities, with the majority of the state’s transmission owned and operated by a federal entity. These entities operate under different governing laws, with different types of regulatory and governing oversight.
 - Are you aware of any legal barriers to Oregon entities joining a Regional Transmission Organization?
- (2) **Oregon-Specific Net Benefits:** Technical analyses of RTO formation in the West, inclusive of Oregon, have identified significant quantifiable net economic benefits for the regional power system. There would likely be some variation, however, in the distribution of these net benefits across individual states and utilities.

What are your perspectives on Oregon-specific net benefits that would accrue from RTO formation? Specifically:

- Are there reasons why you believe that these net benefits found in the technical analyses might be greater or (more importantly) lesser in Oregon? Do you believe there is a need for additional technical analysis of the particular costs and benefits to Oregon from RTO formation?
 - What are some of the costs and risks that participation in an RTO might introduce specifically for Oregon? Please suggest how these might be mitigated to ensure net benefits to Oregon and how these mitigation measures can be designed to center underserved and low-income communities.
- (3) **Oregon Retail Customers:** RTO formation could generate significant economic benefits for participating entities, even after taking into account the cost of participating in and operating an RTO. It is important to consider how these costs and benefits would flow through to Oregon’s retail electricity customers.

What are your perspectives on costs and benefits to Oregon retail customers associated with RTO formation? Specifically:

- What are some costs that might accrue as a result of participation in an RTO, and how might these be balanced against stated benefits? How might net benefits be measured?
 - What mechanisms or processes would be needed to ensure that the net economic benefits accrued from RTO formation directly benefit Oregon retail customers?
- (4) **Principles:** Separate from the consideration of the technical questions below, there may be areas of common ground among stakeholders that can be identified with respect to core principles (e.g., independent governance, a minimal expectation of net benefits to Oregonians, preservation of state policy influence, etc.) that can inform how Oregon evaluates potential RTO formation.

Are there core principles that should guide Oregon’s evaluation of potential RTO formation?

Technical Questions:

- (5) **Transmission Rates:** The elimination of pancaked transmission rates has been identified as a significant source of economic benefits resulting from RTO formation. Given the existing variation in transmission rates across Oregon (and the broader West, including CAISO), the impacts on individual transmission customers and transmission owners would likely vary.

Please provide feedback on how these potential impacts to transmission rates from RTO formation would or would not be preferable to the status quo. In responding, you might also consider the following questions:

- **Rates.** Do you expect that the adoption of uniform transmission rates under an RTO would result in net benefits or costs?
- **Revenues.** Do you expect that the adoption of uniform transmission rates under an RTO would result in a net increase or decrease of revenue for Oregon transmission owners?
- **Solutions.** Can you describe or identify potential solutions or mechanisms (e.g., examples from other RTOs) to address any adverse impacts related to transmission rates resulting from RTO formation?

- (6) **Transmission Planning & Operation:** An RTO would be able to provide coordinated transmission planning functions and would centrally operate the transmission system across a wide geographic area, with revenues accrued from individual transmission assets flowing to the participating transmission owner.

Please provide feedback on how these potential impacts to transmission planning and operation would or would not be preferable to the status quo. In responding, you might also consider the following questions:

- **Generator Interconnection:** RTO formation would standardize the process for interconnecting large-scale generators to the transmission system across a wide area. What are the pros and cons of this compared to the status quo? How can an RTO be designed to address these issues?
- **Transmission Planning and Expansion:** An RTO would affect decisions about the need for new transmission investments. What are the key advantages and disadvantages of this compared to the status quo? How can an RTO be designed to identify least-cost solutions that maximize retail customer benefits?
- **Cost Allocation:** An RTO could provide a uniform mechanism for allocating the costs of new inter-regional transmission investments. Is the status quo mechanism for allocating the costs of inter-regional transmission projects preferable? What concerns do you have about transmission cost allocation by an RTO?
- **Legacy Transmission Rights.** RTO operation of the transmission system would seek to replace the existing system of bilateral transmission rights. How would converting those legacy transmission rights into financial rights compatible with an RTO ultimately affect Oregon retail customers? What mechanisms or processes could be developed to mitigate these concerns?

- (7) **Renewables:** An RTO can be designed to support and accelerate the deployment of renewable energy projects, but these design choices could also create new challenges in some cases.

Please provide feedback on how the implications on renewables development from RTO formation would or would not be preferable to the status quo. In responding, you might also consider the following questions:

- **Types of renewables:** Technical studies indicate that the *types* (e.g., wind or solar) of renewable energy projects developed in a state may be substantially impacted by RTO formation. For example, the capacity contribution value of developing particular types of renewables in Oregon may increase or decrease in a West-wide RTO compared to the status quo. Do you anticipate impacts to the types and scale of renewables developed in Oregon would result from RTO formation?
- **Location of renewables:** Several studies found that West-wide RTO formation could result in a significant shift in the *location* of renewable development across different states and regions of the West. This could present opportunities and challenges for Oregon. Do you expect that changes in the location of renewable development would be a net positive or negative for Oregon?
- **PURPA:** Pursuant to multiple FERC Orders (most recently FERC Order 872), utilities participating in an RTO are exempt from their legally enforceable obligations under PURPA to make avoided-cost pricing available to renewable qualifying facilities with a capacity between 5 MW and 80 MW on the basis that RTOs provide non-discriminatory access to energy markets for projects of this size. What are the pros and cons that these changes to PURPA implementation would create for Oregon?
- **Distributed Energy Resources:** While a consequence of an RTO could be to adversely affect the adoption of DERs, RTO energy markets could also be intentionally designed to provide new, uniform revenue streams that make it easier to finance DERs. How should RTO design take into account the opportunities and challenges associated with developing DERs? How can RTO design facilitate the adoption of DERs in high-risk, underserved, or low-income communities?
- **Manufacturing potential:** Some studies note the potential for benefits of RTO formation that are difficult to anticipate or quantify, such as the economic benefits associated with in-state manufacturing of clean energy technologies at-scale. Do you anticipate that substantial economic benefits associated with clean energy manufacturing in Oregon could accrue from RTO formation?
- **Oregon jobs:** These issues related to the development of renewables have the potential to affect the number and quality of jobs in the clean energy sector in Oregon. Do you anticipate that RTO formation would result in a net increase or decrease in Oregon-based jobs in the clean energy sector? How can these considerations be incorporated into the design of an RTO?

- (8) **Environmental Impacts:** Aggressive carbon policies already in place in the West, including Oregon, make it unlikely that RTO formation would significantly accelerate a reduction in carbon emissions. There are, however, other potential environmental considerations resulting from RTO formation.

Please provide feedback on how the environmental impacts resulting from RTO formation would or would not be preferable to the status quo. In responding, you might also consider the following questions:

- **Thermal dispatch:** There is some potential that RTO formation could result in a short-term increase in the utilization of existing thermal plants, even though most studies find RTOs support the retirement of coal plants and the efficient operation of remaining gas plants, to the degree they are responsive to market price signals. Would these issues create a barrier to RTO formation? Could these issues be addressed through the design of an RTO?
- **Geographic footprint of renewables development:** As noted previously, RTO formation could affect the location of renewables development across the West, with the potential to result in different land use impacts in Oregon (in terms of resource type, scale, and location) compared to what might occur absent an RTO. How could an RTO be designed to ensure that potential adverse land use, and other associated environmental and biological, impacts to Oregon are adequately addressed?
- **Environmental Justice:** Energy production and delivery has had disparate impacts (both in terms of opportunities created and adverse effects) on different communities across Oregon. Would there be opportunities in designing an RTO to support the state's interests in addressing disparate impacts and environmental justice issues?
- **GHG accounting:** Accounting for the GHG emissions profile of electricity across different regulatory regimes, markets, and state boundaries can be challenging. How could this issue be incorporated into considerations of RTO formation?

- (9) **Climate Resilience:** For the most part, the studies reviewed did not consider the impacts of RTO formation on energy resilience in the context of our rapidly changing climate. For example, just in the last year, catastrophic wildfires have necessitated the need to shut off power to Oregon communities; historic winter ice storms resulted in widespread outages in the Willamette Valley; and dense smoke from a wildfire earlier this summer forced an outage of major transmission lines connecting Oregon to California.

Please provide feedback on how climate resilience implications resulting from RTO formation would or would not be preferable to the status quo. In responding, you might also consider the following questions:

- **Geographic diversity of resources:** What opportunities (e.g., new mechanisms for monetizing and supporting the deployment of resilient microgrids) and challenges (e.g., potential for increased reliance on transmission to import power) could an RTO create to support energy resilience for Oregon communities? How could these issues be taken into account when designing an RTO?
- **Wildfire nexus:** The recent shutdown of the AC intertie to California for multiple days due to wildfire smoke is an example of the nexus between wildfires and transmission lines. How can wildfire risks be mitigated in the design of an RTO?

Governance & Design Questions:

- (10) **Governance:** Many of the issues identified here help to illuminate the need for effective governance of an RTO that would ensure Oregon’s perspectives are adequately represented.

Please provide feedback on the priorities or principles that should be incorporated in the development of governance mechanisms for an RTO. In responding, you might also consider the following questions:

- **Best Practices:** There are a variety of RTO governance models across the country. Can you identify any best practices in RTO governance from around the country (or internationally)?
- **New Practices:** What are some new governance mechanisms that could ensure net benefits to Oregon retail customers are considered as a result of Oregon RTO participation?
- **State interests:** Some stakeholders in other RTOs contend that vesting too much governing authority in participating utilities and existing transmission owners makes it difficult for the state to adopt and implement new policies. How can an RTO be designed to balance the interests of meaningful state oversight and policy with the interests of RTO participants?
- **Governance principles:** Can you identify or describe specific governance principles that you believe should be incorporated into the design of any RTO? For example: geographic balance of representation on the governing board; public power representation; mechanisms for meaningful input and guidance from state policymakers; retail customer protections; opt-out provisions for participating members; etc.

- (11) **Market Design Optionality:** There are numerous ways that energy markets could be designed. The studies we reviewed considered multiple different constructs, from the bilateral status quo, to an expansion of real-time (EIM) and day-ahead markets (EDAM), to multiple full RTOs across the West or a single West-wide RTO.

Please provide feedback on the priorities or principles that should be considered when designing specific energy markets like those that would be administered by an RTO. In responding, you might also consider the following questions:

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Prepared by: Staff, Oregon Department of Energy

- ***Retail Customer Benefits:*** Assuming that substantive barriers and challenges can be satisfactorily addressed, do you expect the cumulative benefits to retail customers in Oregon to be significantly greater under certain constructs than others? Is a minimum viable size for the geographic or jurisdictional scope of an RTO necessary to achieve sufficient retail customer benefits to justify forming an RTO?
- ***Optionality:*** Are there opportunities to consider different ways of dividing the traditional functions of an RTO across multiple legal entities in a manner that can simultaneously maximize benefits to Oregon retail customers while minimizing other potential barriers or concerns (e.g., around governance or preserving state influence over Resource Adequacy)?
- ***Marginal Cost Dispatch:*** What types of changes, if any, might be incorporated into the design of RTO energy markets to support regional system reliability as zero marginal cost renewables increase their share of the power mix?