

Oregon Energy Strategy
 Developing Clean Electricity Generation and Transmission Policy
 Working Group Meeting 2

February 26, 2025, 9:00am – 12:00pm.

Post-Meeting Notes

Meeting Summary

Joni Sliger (ODOE) presented on four key findings of the energy pathways modeling to inform the policy discussions of the Developing Clean Electricity Generation and Transmission Policy Working Group (PWG). These findings pertain to significant near term load growth, reliance on in- and out-of-state resources for a least-cost electricity portfolio in Oregon, a need for expanded transmission, a need for more electricity generation capacity, and a likely need for further policies to support decarbonizing Oregon’s electricity supply. Joni and Ruchi Sadhir (ODOE) facilitated digital whiteboard exercises for PWG members to brainstorm barriers and issues related to the key findings and pathways presented by the modeling. ODOE is reviewing the discussions and brainstormed materials from the PWG to prepare for Meeting 3 of the PWG, which will focus on discussing existing Oregon policies related to the issues and barriers brainstormed in this Meeting 2.

In-Meeting Notes

Participants

ODOE	Oregon Agencies	WG Members
Joni Sliger	Jeremy Thompson, Oregon Department of Fish and Wildlife	Sidney Villanueva, Blue Skies Law
Jason Sierman	Nataliya Stranadko, Oregon Department of State Lands	Dan Dorran, Umatilla County
Hugh Arceneaux	Gabriela Goldfarb, Oregon Health Authority	Kelly Howsley Glover, Wasco County Community Development, Columbia River Gorge/East Central Oregon
Alan Zelenka	Crystal Grinnell, Oregon Water Resources Department	Laura Tabor, The Nature Conservancy
Edith Bayer	Alyssa Bonini, DLCD	Diane Brandt, Renewable NW
Jennifer Villanueva	John Tokarczyk, Oregon Department of Forestry	Jacob Goodspeed, PGE
Jessica Reichers		Shannon Souza, Sol Coast Consulting & Design on behalf of OCEAN & OSSIA
Josh Price		Hannah Dondy-Kaplan, Bonneville Power Administration
Michael Freels		Chris Golightly, CRITFC

Rob Del Mar		Jared Hansen, Idaho Power
Stacey Heuberger		Ryan Perry, Tillamook PUD, Oregon PUD Association
		Robin Hayakawa, Central Oregon LandWatch
		Tamra Mabbott, Morrow County
		Alec Shebiel, Umatilla Electric
		Anahi Segovia Rodriguez, Verde NW
		Jacob Goodspeed, PGE
		Jess, Rogue Climate
		John Hart, EWEB
		Joshua Basofin, Climate Solutions
		Justin DeMello, City of Hillsboro, League of Oregon Cities
		Neil Jones, PacifiCorp
		Patty Satkiewicz, PacifiCorp
		Petra Schuetz, Benton County
		Ryan Perry, Tillamook PUD
		Natalia Ojeda, Energy Trust of Oregon

Introduction

- Joni Sliger (ODOE) introduced the call and ODOE staff supporting the call
- Joni reviewed ODOE’s mission and responsibilities and went over WebEx and its functionality.
- Joni reviewed the five Policy Working Groups and the scope of the Developing Clean Electricity Generation and Transmission Policy Working Group¹
- Ruchi Sadhir (ODOE) introduced the purposes of the call, to:
 - Build understanding of learnings coming out of the model, specifically those related to developing clean electricity generation and transmission for Oregon loads.
 - Consider Oregon’s existing policy landscape.
 - Provide feedback on electricity sector priorities, policy gaps and opportunities.
 - Develop policy actions that could help advance progress toward further decarbonizing the electricity sector.
- Ruchi displayed the PWG roster and expressed appreciation for folks’ participation
- Ruchi went over the group agreements for the PWG
- Ruchi spoke to meeting guidance
 - The current meeting is focused on identifying barriers relevant to the modeling findings from Phase 1 and the scope of the PWG. The modeling provides one of several sets of information to guide Phase 2 discussions and Ruchi emphasized that ODOE hopes the PWG will help explore the Energy Strategy through other lenses.
 - Ruchi explained that a future meeting will be focused on solutions, but that this meeting is focused on barriers in particular
- Ruchi went over the meeting agenda, highlighting that the agenda intends to provide more time for discussion relative to presentation

¹ These can be reviewed at [2025-02-26-OES-PWG-Developing-Clean-Electricity-PPT.pdf](https://www.oregon.gov/energy/ODOE/Pages/2025-02-26-OES-PWG-Developing-Clean-Electricity-PPT.pdf) at p4.

- Sidney Villanueva, Blue Skies Law, expressed appreciation to Joni, ODOE for budgeting additional time for discussion

PWG member introductions and policy areas members hope to discuss

- Alyssa Bonini, DLCD; interested in solar energy and offshore wind (OSW)
- Crystal Grinell, OWRD; interested in water resource issues generally
- Commissioner Dan Dorrn, Umatilla County; interested in non-carbon resources hydroelectric, solar, wind, and TX, as well as nuclear SMR and natural gas projects, given high energy use, resources, and TX in the county. High energy in the use includes irrigation, robotics; expressed disappointment that SMRs were not modeled in Oregon and appreciates that legislative attention will be required for firm dispatchable resources coming up; hopes the Strategy will be able to address SMRs on an all-of-the-above strategy basis
 - Joni clarifies that SMRs were allowed outside of Oregon, based on siting restrictions, but were not selected; Alan states that the model didn't select SMRs because of cost concerns.
 - Commissioner Dorrn states that blended energy generation programs from federal sources should be considered
 - Alan clarifies that the modeling relied on federal, NREL data to assess resource costs
- Diane Brandt, Renewable NW; interested in utility-scale grid decarbonization; TX and permitting, broad scope of interest
- Hannah Dondy-Kaplan, BPA; here in a listening capacity to share info with BPA TX team;
- Jared Hansen, EWEB; Interested in load growth and meeting that growth in his region. Also interested in permitting, including B2H and TX permitting
- Jacob Goodspeed, PGE; interested in when to bring solar, wind energy and battery storage into PGE portfolio;
- Jennifer Villanueva, with ODOE and listening;
- Jeremy Thompson; interested in wildlife issues in energy siting
- Jess, Rogue Climate; interested in providing for just and equitable element of clean energy transition and associated development
- John Tokarczyk, ODF; Interested in TX and generation;
- Jon Hart, EWEB; interested in types of resources will available in the future and where/when they'll be developed and how to transmit those resources to where need is;
- Justin DeMello, Hillsboro; interested in economics and supporting the tech sector, and how to accelerate TX development to meet tech needs;
- Laura Tabor, TNC; ensure that OR's clean energy goals are met with minimal environmental impacts; interested in TX and renewable development in least costly places
- Nataliya Stranadko, DSL; interested in land-use change, policy; also interested in offshore resources and providing consistency in interagency work streams. Also subject matter expert (subject)
- Neil Jones, PacifiCorp, sitting in for Scott and generally listening in
- Pat DeLaquil; interested in better understanding the modeling work and how that fits into policy; interested in balancing TX and distribution needs;
- Patty Satkiewics, Pacificorp; starting in TX policy and listening in;

- Petra Scheutz, Benton County; interested in water supplies and sustainable materials management;
- Robin Hayakawa; sitting in for Rory Isbell; interested in the land-use implications, especially for farmland, for clean energy transition; interested in identifying areas of least conflict for affordable energy
- Ryan Perry, Tillamook PUD; firm load capacity, non-emitting resources, nuclear
- Shanna Brownstein, Rowan Digital Infrastructure; sustainable data center development. Interested in how data center sector can become a grid-asset and participate constructively from a community support, generation, and TX perspective;
- Shannon Souza, Sol Coast Consulting and Design; interested in South Coast/Coos Bay, end-of-the-line communities; interested in firm generating capacity and capturing locational values in the Energy Strategy and modeling;
- Sidney Villanueva, Blue Skies Law; advocates for competitive energy opportunities and interested in TX;
- Tamra Mabbott, Morrow County; interested in TX and renewable/non-renewable permitting; interested in land-use, cumulative impacts in projects and TX siting. Interested in looking to consolidated TX line siting;
- Chris Golightly, CRITFC; interested in implementing Energy Vision to provide for fish-friendly energy transition, tribal fisheries interests, tribal lands;
- Alec Shebiel; interested in expediting transmission permitting;
- Joshua Basofin, Climte Solutions; interested in the general topic of clean generation and TX; interested in dialogue around costs and dealing with long-lead time resources like OSW and geothermal; interested in digging into comparing costs;
- Anahi Rodriguez; interested in the meeting conversation overall and hearing different perspectives
- Ruchi opened space for questions from PWG members as to the Energy Strategy process generally
 - Tamra; how would Energy Strategy work fit in with other working groups in the state and the current legislative session;
 - Ruchi, second question; currently, PWG is raising policy issues for a report due to legislature by November; ODOE is well-aware of ongoing legislative conversations. Wants to keep Energy Strategy policy conversations separate from legislative conversations, but use the latter to inform policy recommendations; goal will be for the Energy Strategy to inform near-term policy in the upcoming 1-5 years; the Energy Strategy is focused on near-term, where policy decisions may be more certain
 - Joni; Energy Strategy will try to keep the work from this PWG integrated with other PWGs by, for example, ODOE staff listening in and sharing materials from other PWGs

Presentation

- Joni went over upcoming meeting agenda and spoke to materials ODOE is releasing, based on PWG and commenter interest to support PWG work, including modeling key findings, modeling assumptions, and a comment-response document for Phase 1. Joni also explained that an in-

depth Technical Report for the energy pathways modeling is forthcoming, as well as results on the Energy Wallet

- Currently existing policies; Joni says ODOE will be unable to provide a list of those policies today but will preview a list before the PWG's next meeting on March 17
- Pathways Modeling; 5 key findings for this PWG
 - Significant near-term load growth;
 - In- and out- of state resources contribute to least-cost supply portfolio
 - Need for more physical TX capacity
 - The model consistently builds more generating capacity
 - Need to expand from current policy
- The modeling provides direction; the modeling shows that electricity is a key fuel for Oregon, but there are different pathways towards an important expansion in the electricity system. So, current PWG should focus on "how" to expand the electricity system
- Key considerations;
 - ODOE has drafted four key headings to help organize discussion; these are not set in stone, but are intended to capture the main directions from the pathways modeling: these include
 - Facilitate responsible development of electricity infrastructure in Oregon
 - Promote resilience for local communities
 - Enhance the availability and efficient usage of transmission regionally
 - Foster regional collaboration and efficient resource sharing
 - Joni explains that these directions from the modeling need to be analyzed in light of key considerations highlighted; the modeling solved for cost, and considered siting and reliability; other key considerations, along with modeling considerations, should inform PWG discussions
 - ODOE asks that PWG members take in modeling findings, personal professional and lived experiences, to inform contributions to PWG
- Step-by-step process;
 - Joni presented on the route forward for the PWG in the form of the analysis matrix being used by all PWGs
- Miro Board;
 - Joni explains that the main categories drafted should be used in Miro brainstorming, but ideas within scope of the PWG but not within the drafted buckets should be included in the parking lot areas
- Considerations for coming meetings;
 - Consider existing policies to address barriers; where are additional policies or programs needed; what are policy gaps you hope to address
- Policy landscape;
 - Main focus will be state-level policies, like mandates and tax credits, studies and conversations, programs. Non state-level policies are relevant to the Strategy as well
- Policy timeline;
 - Energy Strategy report is due November 1, 2025; the Strategy will focus primarily on "near-term" policies for the 2026 and 2027 legislative sessions in particular
- Energy in Oregon;

- Not all policies in Strategy need to be universally applicable; the state has 41 different electric utilities and many service territories
- Joni presented a slide, based on DEQ, of electricity sales by different utilities, with different growth rates and demand; so policies don't need to be one-size fits all
- Draft list of existing policies;
 - Joni highlighted the working list of existing Energy Policies; states that providing a full list would be too long to undertake, presenting both on non-exhaustive existing policies and existing workstreams
- Ruchi: reiterated that the call is focused on barriers.
 - Joshua Basofin; regarding policy development trajectory and legislative sessions. Asks if this PWG will be ideating on legislative proposals; what's the scope of the group activities?
 - Ruchi; if the PWG is able to get to a high level of granularity, that could be a goal; but it depends on the work of this group. In other energy strategies, a focus is to identify common grounds for policy to focus on, such as permitting for TX
 - Edith Bayer (ODOE); agrees, states that the bill calls for a report due on November 1. This Report should highlight discussions from PWGs that highlight needs in Oregon; but likely would not get to level of detail of drafting legislative language. Per other states' strategies, it's about providing a unified, state-wide vision that elevates priorities
- Diane Brandt;
 - Understands that HB 3630 calls for recommendations; there's some latitude in the bill for what types of recommendations are authorized for the Strategy
 - Edith; says we are now focusing on legislative recommendations, but other forms of policy, such as regulations, local policies, or directing support, are within scope of the report.
- Nataliya Stranadko;
 - As we are talking about achieving climate goals and clean energy target under HB 2021 (2021), is it possible to prepare a slide for the next meeting extracting from the model results on greenhouse emissions trend we can have to achieve 100% by 2040?
 - ODOE directed Nataliya to the [key findings document](#) at p7

Whiteboard Exercise

- ODOE provided Miro link in the chat and went over how-to tips for using Miro.²

Question 1: What are barriers or competing priorities you see?

- Categories:
 - Community-scale generation and/or storage?
 - Large-scale generation and/or storage?
 - In-state TX?
 - Other barriers?

² The results of the Miro whiteboard brainstorming exercises are transcribed below and are available at [02-26 Developing Clean - Miro](#).

- 10:27: After silent brainstorming, Ruchi asked if anyone sees comments they'd like to explore or explain further
- Jared Hansen; there's a lot of information on small-scale generation and storage, but relatively little on TX; wanted to reflect that
- Shanna Brownstein; a consistent barrier in policy conversations is cooperating with utilities is siting stuff (small scale renewables, storage, TX, etc); private sector wants perfect information as to where TX constraints are, but there's a chicken-and-egg problem; better dialogue to inform efficient grid-investments would be beneficial and expedite. Happy to discuss more
- Jared asks about a definition for small- and utility-scale generation and storage; when considering a single MW, or individuals installing Tesla powerwalls? Devil is in details when trying to address local or larger constraint on system. Finding that there's an economy of scale for installing small-scale resources; these resources can replace for grid-scale investments, but this value is dependent on economy-of-scale. Jared's speaking from a rural perspective. He recognizes the battleship-game problem and how privacy can pose a barrier to efficient development
 - Joni; wants to reiterate that the categories are intended to be useful; scope of this PWG is everything in front of the meter.
- Pat; thinks there's an all-of-the-above answer for all to build out the system; DERs will become more valuable as other resources become more constrained. Need to better-value DER benefits and expedite TX processes; stated that utility-scale planning is too siloed and that coordinated efforts are needed to identify where high-value TX is, how to expedite permitting without stepping on folks' rights. Thinks need for community-wide cooperation on the problem in the state is important
- Shanna; another challenge she has noticed is a lack of holistic energy planning. States there's distrust among gas companies that regional planning can help with winter peak needs; there's a need to review holistically, from an unbiased agency or group could benefit statewide energy planning. Inefficiency in siloed planning processes. Also, across energy types beyond electricity; if you change demand structure for end uses, you can relocate need for electricity.
- Ruchi; wanted to point out GETs as an issue being raised, and state that there are relevant bills on GETs.
- Ruchi also sees workforce, labor, professional development needs; asks if anyone wants to speak to these barriers
- Sidney Villanueva; interested in financing and whether there is a related barrier
- Laura Tabor; in-state TX, there's an issue of where TX will be placed and how it relates to expected load and generation centers. So, interested in placing constraints on a larger-scale map and considering value of holistic planning
- Ruchi; we will move to a new topic after break
- Jess, Rogue Climate; community side of resilience and barriers. Jess says all issue areas reflect need to balance meeting resilience needs, climate goals, and impacts of development; on level of TX, there's community concern around wildfire risks and need for resilience. Echoes Shannon Souza's concern for south coast end-of-line interests and local impacts, to ensure that energy burdens and costs aren't inequitably raised

- Ruchi appreciates the response and elevating the need to recognize environmental justice interests in the Energy Strategy; stated that broad support is needed in developing the Strategy.
 - Joshua Basofin on GETs; intended to highlight that TX constraints impact Oregon, and so GET hardware and software solutions provide for more capacity to the grid at a relatively low cost and can respond ably to wildfires. Says these have not been deployed at a large scale in Oregon; interested in these
 - Joni asks if Joshua can identify barriers to deployment of GETs
 - Joshua; there's not a regulatory process to identify where GETs are most useful; says there's a pending bill to address this need
- Break, 10:50-11:00

Question 2: Promoting resilience for local communities

- Categories:
 - Barriers to small or community-scale generation and/or storage?
 - Barriers to microgrids
 - Barriers to emergency preparedness
 - Other barriers?
- Joni explains that the energy pathways modeling addressed reliability but not community resilience needs; this is the space available to raise those factors
- Jessica Reichers (ODOE) raises coordination as a theme visible from the whiteboard; asks if any PWG would speak to coordination issues
- Jessica raised notes on needs for technical assistance and training; Jessica asks if the training is needed for actual installation or community outreach and education
 - Shanna Brownstein; says she'd like to see utilities take the lead as to explaining a co-ownership strategy, how the grid works to communities and interested folks; says utilities have the relevant expertise
 - Shanna would appreciate seeing utilities partner with communities to deploy small-scale resources at schools, for the benefit of the grid and for community resiliency; schools are already a community gathering place. A shift in perspective to "how can be make this work" as opposed to "why can't this work"
 - Jessica expresses appreciation for the comment and need to examine shared costs and benefits for this approach
 - Shanna; says Portland public schools have outdated infrastructure in terms of AC, air quality, internet; schools are asking for better infrastructure, and utilities are well-positioned to partner with schools and bring in grants
 - Pat DeLaquil agrees that schools have large rooftop area and interconnection resources and could double as emergency shelters for resilience. Agrees this is a huge community and economic development opportunity
- Joni reflects hearing that lack of information can be a barrier for utility to do this as well to understand what the community wants and what to prioritize to meet local needs
 - John, EWEB; microgrid projects have unclear ownership control benefit issues. So, emergency water locals co-located with schools, with batteries and equipment; but there are issues with use of these resources as a microgrid. So,

there's a question whether EWEB can use school panels to power batteries vs schools needing those resources for their own resource recovery.

- So, raises a question; who is the microgrid for? And is there control consistent with the purpose for which the grid was developed
- Shannon Souza; wishes she had an example of what works, but from IOUs and COUs, projects that work;
 - IOUs, they'd hoped that a distribution system upgrade and modernization that was worked through with PUC would bring solutions to forefront in distribution planning process; any ways that IOUs could be set up to work collaboratively very early in the process, with communities without resources to approach IOUs, would be valuable; providing a shortlist of critical facilities where IOUs can start with for DSP process. This would flag critical facilities where resilience benefits would be available for communities and where power quality could be improved for end-of-line communities, referring to schools shutting down for power outages at end-of-the-line communities
 - COUs; would love to embrace microgrids, but have outdated net metering priorities and possibility of violating preferred provider agreement with BPA. There are policy barriers that can be addressed from net metering, but more problematic on BPA side
 - Joni reflects hearing lack of information (for who) as to what communities need; also, regulatory uncertainty
 - Shannon adds that utilities need to understand community needs and communities need to understand what resources utilities have; transparency issue consistent with that raised earlier by Shanna
- Pat DeLaquil
 - Expressed appreciation from Shannon and Jon. Says, in theory, it should be as simple as a rental agreement between utility and school; but obviously it's not that simple. Would appreciate digging into John's issues and what utilities Jon would like to see; Pat expects that utility would need to retain control of resources, absent emergency circumstances where services would need to be guaranteed from the resources to where that energy generation is sited or needed
 - Jon; says there are a myriad of issues here; including questions as to who counts as a "utility" and how to coordinate with stakeholders for these siting projects who don't often operate or manage electricity generation resources
 - Generally, need clarity in roles at outset of these projects, which could help define the capacity of these systems. If EWEB owns and controls equipment, then panels won't serve schools; thinks clarity is needed in these agreements and having a clear, repeatable model would be beneficial. It's hard to scale these solutions because there's complexity, it's not a standard product; these are custom products hard to implement at a small scale
- Shanna, chat: I had an intern do a case study of the Beaverton microgrid project at the police station when I was at PGE. I'll see if I can find it and will share it with facilitators.

Questions 3 and 4

- **3: Enhancing Availability and Efficient usage of TX Regionally**
- **4: Fostering Regional Collaboration and Efficient Resource Sharing**
- Joni explains that the model had more efficiencies that present in the real world today; focus here is whether those efficiencies can be realized from recognizing, addressing policy barriers
- Jessica reflects seeing comments on regulatory uncertainty and a need for improved regional coordination
- Joni asks if anyone can speak to barriers on why Oregon doesn't have a regional transmission organization (RTO), and what opportunities may be available there
- Sidney Villanueva; there are many barriers to RTOs that could be discussed separately; generally wants to note that there's a slow process towards an RTO in the state
- Pat DeLaquil; states that he's heard that a stepwise approach to an RTO is needed from Heutte. Unclear what the next step may be, but it'd be helpful to consider a stepwise approach and whether currently proposed legislation is the appropriate next step
- Ryan Perry; states that regional energy markets, the Southwest Powerpool, and BPA direction may force a step towards RTOs, especially if there are more fragmented systems in a wider path; would be a regional issue that would force formation of an RTO slowly
- Alec Shebiel, chat: My Miro seems frozen to unmute - the concerns are state mandates to COUs because they are mandates to IOUs. We are member owned, and that means we are responsive and accountable to our members. For example, UEC already does GETS, we don't need to be mandated to.
 - Expanding on this; in legislation, folks don't appreciate distinctions between IOUs and COUs, which necessitate different mandates. States that some policies, such as GETs, are happening at the COU level; education as to structural differences between COUs and IOUs is important
 - Joni reflects that this statement is consistent with the perspective that not all policy solutions need to be one-size fits all
- Shannon Souza; on market uncertainties, with large new loads, some of those loads are taking matters into their own hands. Sometimes, big data facing delayed responses may provide for private development of energy and TX development and coordination with tribes. States that this element can complicate planning
- Shannon Souza; has observed Microsoft building their own TX lines, leading to increased Right-of-Way costs for PUDs
- Jared Hansen; TX development takes too long. B2H took hundreds of thousands of pages for permitting because process is not conducive to long TX construction; its easy for reviews and re-reviews to get triggered, and presents challenges to utility planning, system cost, and reliability
- Commissioner Dorrان; to previous comment on barriers on a more regional/geographic basis. As commissioner to a country with three different providers and large energy needs; its necessary to realize that customers are paying their way forward/paying for their own use. Does not want to look at development projects and renewables as barriers as much as examples of success and paths forward. Thinks developers and high-

energy users are too frequently referred to as barriers; understands there are differing views on the subject, but County's perspective is that these are not barriers.

- Jessica; to wrap up, there are different lenses for assessing issues for the strategy, and the important thing is to see issues as barriers or opportunities based on these different lenses

Next steps

- March 7, next Friday, there will be modeling office hours;
- March 13, webinar on complementary analyses results [*post-meeting note; the release of these results has been postponed to early April*]
- Considerations for coming weeks; what existing policies are in place to help address barriers; where are additional policies or programs needed.
- Joni thanked the PWG and adjourned the meeting

Whiteboards

The results of the Miro whiteboard brainstorming exercises are transcribed below and are available at [02-26 Developing Clean - Miro](#). A “++” symbol indicates the presence of an emoji in support of the identified barrier.

Whiteboard Q1

**Question 1: Facilitating responsible development of electricity infrastructure in Oregon:
What are the barriers or competing priorities you see?**

Barriers to Small or Community-Scale Generation and/or Storage?	Barriers to Large-Scale Generation and/or Storage?	Barriers to In-State Transmission?
<ul style="list-style-type: none"> • Financing • utility cooperation on locating resources in places that are beneficial to the grid • Land-use and zoning • Lack to clear valuation of the grid benefits provided by DERs. • Utility interconnection cooperation ++ • Land availability • Logistical and regulatory barriers to microgrids • Cost Effectiveness compared to other solutions++ • Cost Prohibitive/Cost Effectiveness • Local capacity to identify opportunities and plan projects • anticipated lack of incentives in Trump era • Lack of incentives • Net Metering Policies • COU Net Metering Policies • Conflict with cost recovery requirements • Access to network hosting capacity • What is the problem that you're trying to solve and is this the most effective tool? 	<ul style="list-style-type: none"> • Direct Access Limits • Federal uncertainty for offshore wind leases • Prohibitions on developing limited run thermal capacity • conflicts with existing land use • No existing market for valuing storage • Concerns about cumulative impacts to ag economies • possible local opposition to builds/ siting • Finding and acquiring /accessing suitable sites • large scale renewables without storage reliability • Outdated avoided cost models • High cost of resources (e.g., SMRs) • large scale solar and water needs for ongoing cleaning • High cost of resources (e.g., SMRs) • lack of queue reform or innovative thinking around queues and studies • A disjointed interconnection process and utility incentives for self-generation • Lack of transmission from areas with low cost energy 	<ul style="list-style-type: none"> • Length of queues and delays in processing, costs for upgrades • No "perfect" information. (we don't have all the possible transmission projects to compare) • Right-of-way acquisition • Wildfire Risk with transmission over Cascades • Permitting • Very long equipment lead times • \$ • NIMBY • National Scenic Area prohibitions for Northern state transmission lines • Physical constraints especially in developed areas • State engaged in marketplace decisions • Land use barriers • Regulatory Limits - FSEC timing, TP planning, IOU IRP timing, etc. • Need policies that promote the development of transmission mitigating capacity near load centers. Not just batteries.

<ul style="list-style-type: none"> • Capture of locational benefits to community reliability/ resilience and grid values 	<ul style="list-style-type: none"> • Interconnection & Transmission constraints • Lack of transparency in procurement and portfolio development • \$ • Interconnection queue++ • Supply-Chain • consider amendment to land use standards to allow coordinated planning • Markets for alternative sources such as waste-to-energy • Transmission access • impacts to cultural + ecological resources, Indigenous & Tribal lands • No clear ownership of resource development obligation. Too much reliance on leaning on "the market" as a low-cost solution. • consistency with resource and land uses • Risk assessment and addressing uncertainty • A lack of shared development risk model • lengthy procurement processes and delays • Over reliance on BPA to solve these problems 	<ul style="list-style-type: none"> • And promote connectivity to least-conflict areas for RE development (Power of Place, Connected West) • Lack of a State Transmission Authority to identify high value new lines and catalyze public-private financing • no way to balance competing state policy priorities • wildfire risk of transmission lines • failure to include affected tribes early in process • Community Concerns • Not maximizing reconductoring / other use of existing ROWs • Markets for alternative sources such as waste-to-energy • Not maximizing GETs deployment • lack of transmission infrastructure to the coast, especially South Coast • need for comprehensive, coordinated planning. • lack of comprehensive/ holistic planning on in state Tx and innovations (like GETs) • No incentives for developing counterflow capacity resources
<p><i>Barriers in Siting and Permitting Processes?</i></p> <ul style="list-style-type: none"> • lack of sufficient meaningful Tribal consultation • mis/disinformation generating more fear/blocks to processes • lack of sufficient + meaningful community engagement + trust-building • Prohibitions on resources by type in Oregon. • No "perfect" information. (we don't have all the possible transmission projects to compare) • identifying lower conflict sites 	<p><i>Barriers in Financing?</i></p> <ul style="list-style-type: none"> • Lack of certainty WRT federal tax and funding streams • Reactive to load growth rather than proactive • Possibility of pilot projects funding and testing before going to the large-scale infrastructure development • Load risk and the potential for developing a stranded asset. 	<p><i>Barriers in Workforce Availability?</i></p> <ul style="list-style-type: none"> • Local expertise is lacking • not enough Tx engineers and planners ++ • Obstacles to union training and membership • Cluster industry/niche not well established - limiting workforce availability

<ul style="list-style-type: none"> • For projects with state and federal jurisdiction, processes are apples and oranges (process-based federal and outcomes-based state) which makes streamlining difficult • National Scenic Area restrictions for transmission in Norther Oregon • Lack of proactive planning • Coordination between agencies and 'one window' permit's submission as a a potential tool • Codes mute on efficient permit /siting processes • Timelines in issuing permits • Goal 5 and Goal 7 Protections conflict • impacts to rural communities -economic, modified character, visual impacts • Not all communities have resources to negotiate beneficial and equitable CBAs • water availability • Municipal capacity to process applications 	<ul style="list-style-type: none"> • No model for large group financing and risk sharing to allow development to align with more natural load growth. • need to protect residents from rising costs and increasing energy burden for low income BIPOC and rural communities ++ • Uncertainty around interaction between costs to mitigate/avoid local impacts of siting and costs to ratepayers (balancing benefits and burdens across geographies) 	
<p style="text-align: center;">Other</p> <ul style="list-style-type: none"> • All of the above solutions need to recognize limited run thermal generation as a transitional resource that helps to integrate more renewables and potentially reduce transmission concerns • complicated timelines for permitting and regulation that don't always sync with development or needs timelines • lack of regional transmission organization to coordinate and "rationalize" Tx builds and costs • Monopolies • standalone utility planning is inefficient. • Lack of holistic energy usage for state that includes direct use of gas and how it could be used sparingly to promote electric grid resiliency during winter peaks. • water availability (scarcity & variability) -during construction -long-term water need (e.g. cleaning solar panels) 		

**Question 2: Promoting resilience for local communities:
What are the barriers or competing priorities you see?**

Barriers to Small or Community-Scale Generation and/or Storage?	Barriers to Microgrids?	Barriers to Emergency Preparedness?
<ul style="list-style-type: none"> • Inability to monetize resilience and economic development benefits • Legacy net metering policies at COUs • Lack of all above strategy • IOU insistence on ownership ++++ • Provider of choice constraints on COU RE development ++ • pace of install is slow, cost is high • IOU cooperation on siting and interconnection in strategic places • No clear framework for what resilience means. As such, these tools may not be effective in meeting those needs. • No generation resources locally and solar doesn't produce enough to be meaningful at a small scale • Zoning. Industrial land is scarce, and many people don't want utility infrastructure in their neighborhoods. • Lack of local experience and expertise 	<ul style="list-style-type: none"> • High project development costs due to lack of project standardization • Lack of policy clarity around front of the meter microgrid operations. • Cost of scale and consistent load • IOU cooperation on siting and interconnection in strategic places ++ • Allocation of Costs and Benefits • Lack of locational value recognition to grid & community. • Costly, with limited natural opportunities for development. • siting - potential environmental justice impacts • Regulatory issues of who is a utility • more education & technical assistance needed to implement microgrids • Lack of incentives for IOUs to deliver these micro-gridding services • lack of education around topic • Unclear ownership, benefit and control models. • Regulatory uncertainty around interconnection and compensation for energy sent to grid • cost • Value not equal to cost for many 	<ul style="list-style-type: none"> • lack of resources in multiple languages • County or Tribal lack of internal planning capacity. ++ • IOU cooperation on siting and interconnection in strategic places • Uncertainty in federal funding for development. • Lack of liability limits for cooperatives • Cooperation between stakeholders and consideration of critical infrastructure • distributed nature of rural communities. Challenge with energy resilience for residents with wells for drinking water (requires power to access water) • Unclear the extent to which EP is required, or even efficient. EP for what purpose. • Inability to value these benefits ++

Other

- prohibitively high rates for residents that keep rising ++
- mis/disinformation that fossil fuels are necessary for resilience
- Education for community and incentives
- siloes with energy and water planning (resilience, supplies of both)

Whiteboard Q3

**Question 3: Enhancing the Availability and Efficient Usage of Transmission Regionally:
What are the barriers or competing priorities you see?**

Barriers to Siting and Permitting Processes?	Barriers to Financing?	Other?
<ul style="list-style-type: none"> • Lack of accountability and urgency from state and federal agencies ++ • Transparency / access to physical TX/Distribution network hosting capacity analysis. • need to consult with community but who speaks for community? • Efficiency of public process • Should have expedited permitting for transmission in existing ROWs • failure to include tribes early in process • "How can we go through this big infrastructure growth while not massively increasing rates and energy burden?" • Permitting is not a one size fits all approach, would have diferent variables region to region • Competing land use priorities (resource protections, resource land protections, hazard protections, etc) • No multistate development framework and governance, and management structure. • Permitting time 	<ul style="list-style-type: none"> • Flexibility in • financial incentive to build new vs. reconductor etc. • Equitable cost sharing between anchor and future TX tenants. • Permitting uncertainty. • Lack of coordinated state action to catalyze projects • Lack of RTO, Transmission Authority or other central entity to direct investments in transmission • No shared development framework to mitigate risk to smaller development groups • Partnership agreements 	<ul style="list-style-type: none"> • Integration of GETs into utility planning. • state mandates to COUs • General RE: solid waste /effective energy/inadequate - waste segregation, lack of proper infrastructure, insufficient funding, poor public awareness, inconsistent policies, limited recycling options, high upfront costs of waste-to-energy technology, concerns about emissions from incineration, geographical constraints, and lack of coordination between stakeholders • RE: waste manage policies - Selective reporting on emissions has contributed to negative perceptions. For example, reporting emissions from 30-year-old facilities but not from new ones that meet the most stringent modern emission standards. • high demand for transmission suggests possibility for intense solar development along proposed transmission corridors. • high demand for resilience hubs funding, low resources (700 applicants in first year) • Serious attention should be given to development of capacity near load centers to

<ul style="list-style-type: none"> • Lack of a statewide transmission system masterplan. Local govts could do more to help if we knew where the corridors were planned. • Ineffective change management in permitting as transmission routes are adjusted (starting the process over) • Lack of forward planning to avoid community and natural resource concerns. • Developers required to consult with, but not listen to entities like ODFW, tribes 		<p>mitigate peak transmission needs to improve overall utilization and cost effectiveness of existing transmission.</p> <ul style="list-style-type: none"> • Lack of forward planning to avoid community and natural resource concerns.
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Whiteboard Q4

<p align="center">Question 4: Fostering Regional Collaboration and Efficient Resource Sharing (Remember the model was highly efficient. Is there opportunity there?): What are the barriers or competing priorities you see?</p>		
<p align="center">Barriers to Financing</p> <ul style="list-style-type: none"> • Market uncertainties - long term, day ahead, WRAP & large new loads. • Lack of equitable cost allocation mechanisms 	<p align="center">Barriers to Change?</p> <ul style="list-style-type: none"> • Lack of RTO +++++ • Waiting for BPA modernization/ program and contract updates. • 6 state cooperation for PAC • Lack of coordination from BPA due to federal action • Need and solution may be more geographically and supplier driven. Which may define local barriers first before regional. 	<p align="center">Other Barriers?</p> <ul style="list-style-type: none"> • Consideration of regional cap-and-trade system and establishing policy (greenhouse gas emissions inventory) • Consistency & coordination across various workstreams in/with neighboring states (e.g., offshore wind, solar, energy efficiency, climate goals, etc.) • Proposed powerlines need to have route certainty prior to moving to permitting. high demand for transmission suggests possibility for intense solar development along proposed transmission corridors.
<p align="center">Parking Lot</p> <ul style="list-style-type: none"> • Possibility of regional agreement (MoU) to learn neighbors' policies, coordinate & address challenges 		

Virtual Meeting Chat

from Jessica Reichers to everyone: 9:10 AM

Hello, Everyone! Thank you for joining us! Jason Sierman and I are going to be monitoring the chat for questions and comments.

from Sidney Villanueva - Blue Skies Law to everyone: 9:10 AM

Thanks, Joni!

from Ruchi Sadhir she/her - OR Dept of Energy to everyone: 9:11 AM

🔗 Name

🔗 Affiliation

🔗 Focus of your work

🔗 What is one policy area you're hoping to discuss in this group?

from Jason Sierman ODOE to everyone: 9:11 AM

Hi all, this is Jason - happy to see so many familiar names... thanks for participating!

from Chris Golightly, she/her, CRITFC to everyone: 9:13 AM

I've been having issues with speakers etc. come back to me

from Shanna Brownstein to everyone: 9:13 AM

I want to hear what he has to say.

from Chris Golightly, she/her, CRITFC to everyone: 9:14 AM

I figured it out

from Hannah Dondy-Kaplan to everyone: 9:14 AM

hey all try to have the meeting "call you", instead of using computer audio that sometimes works better.

from Ruchi Sadhir she/her - OR Dept of Energy to everyone: 9:15 AM

he wanted to show everyone a unicorn toy that makes a very annoying noise :)

from Tamra Mabbott to everyone: 9:16 AM

I will leave the meeting today at 11:25 to attend another meeting. Thank you.

from Jessica Reichers to everyone: 9:16 AM

Thanks, Tamra.

from Dan Dorran, Umatilla County to everyone: 9:33 AM

I am listening on the phone, but cannot communicate back.

from Dan Dorran, Umatilla County to everyone: 9:37 AM

253.709.1945

from Hugh Arceneaux, ODOE to everyone: 9:38 AM

Key modeling findings for Clean Electricity Generation and TX; <https://www.oregon.gov/energy/Data-and-Reports/Documents/OES-Generation-Transmission-Key-Findings.pdf>

from Joni Sliger, ODOE to everyone: 9:39 AM

📎 Our modeler's summary Energy Strategy Technical Approach, <https://www.oregon.gov/energy/Data-and-Reports/Documents/OES-CETI-EER-Technical-Approach-to-Modeling.pdf>

📎 The summary of Modeling Assumptions and Sources, <https://www.oregon.gov/energy/Data-and-Reports/Documents/Oregon-Energy-Strategy-Modeling-Assumptions-Sources.pdf>,

📎 Phase 1 Public Comment & Response Document, <https://www.oregon.gov/energy/Data-and-Reports/Documents/OES-Phase1-Comment-Response-Document.pdf>

from Joshua to everyone: 9:40 AM

Good morning and apologies for my tardiness. Joshua Basofin with Climate Solutions. My main interest here is in clean energy pathways and transmission system modernization

from Ruchi Sadhir she/her - OR Dept of Energy to everyone: 9:59 AM

Hi Joshua - I see your hand up, I can call you in a couple slides but you're also welcome to put your question/comment here until thne.

from Josh Price, ODOE to all panelists: 10:04 AM

https://miro.com/app/board/uXjVlbichPM=?share_link_id=469704009318

from Nataliya Stranadko to everyone: 10:05 AM

As we are talking about achieving climate goals and clean energy target under HB 2021 (2021), is it possible to prepare a slide for the next meeting extracting from the model results on greenhouse emissions trend we can have to achieve 100% by 2040?

from Jason Sierman ODOE to everyone: 10:08 AM

Hi Nataliya, re: GHG numbers, projections... there is some summary info on that topic in the Key Findings doc...

from Jason Sierman ODOE to everyone: 10:08 AM

<https://www.oregon.gov/energy/Data-and-Reports/Documents/OES-Generation-Transmission-Key-Findings.pdf>

from Josh Price, ODOE to all panelists: 10:08 AM

The email link is the easiest to join the miro board.

from Jessica Reichers to everyone: 10:09 AM

If you are using your phone and want to contribute, you can send your input to Jason and I in this chat, and we can add it for you.

from Alyssa Bonini, DLCD to everyone: 10:10 AM

Stepping away for a moment

from Jessica Reichers to everyone: 10:10 AM

@Nataliya, for the document Jason sent to you, start on page 7 to see the modeled electricity emissions from the model.

from Hugh Arceneaux, ODOE to everyone: 10:12 AM

https://miro.com/app/board/uXjVlbichPM=?share_link_id=469704009318

from Ruchi Sadhir she/her - OR Dept of Energy to everyone: 10:13 AM

https://miro.com/app/board/uXjVlbichPM=?share_link_id=469704009318

from Jason Sierman ODOE to everyone: 10:13 AM

https://miro.com/app/board/uXjVlbichPM=?share_link_id=469704009318

from Laura Tabor to everyone: 10:15 AM

In arrow mode, you can right click to move around,

from Dan Dorrان, Umatilla County to everyone: 10:15 AM

Font on all boards is extremely small and hard to read

from Jason Sierman ODOE to everyone: 10:16 AM

there is some "zoom-ability" in Miro, for all to adjust as helpful

from Jason Sierman ODOE to everyone: 10:16 AM

+ / - icons in lower right corner of the Miro window

from Jessica Reichers to everyone: 10:18 AM

One helpful thing is to be able to type, click on the upward arrow on the very left-hand side of the screen. To be able to move the screen click the arrow again, and the hand cursor will show up to move the screen around.

from Dan Dorrان, Umatilla County to everyone: 10:28 AM

I need to step away for a minute. Apologies

from Dan Dorrان, Umatilla County to everyone: 10:32 AM

I

from Dan Dorrان, Umatilla County to everyone: 10:32 AM

Im back

from Anahi Segovia Rodriguez to everyone: 10:41 AM

Stepping away for second

from Anahi Segovia Rodriguez to everyone: 10:42 AM

back

from Edith Bayer ODOE to everyone: 10:43 AM

Reminder that if you see a comment you agree with or would otherwise like to react to, you can click on the sticky and then on the emoji icon on the panel that comes up to add an emoji.

from Sidney Villanueva - Blue Skies Law to everyone: 10:49 AM

Would this group potentially endorse any pending leg?

from Sidney Villanueva - Blue Skies Law to everyone: 10:50 AM

...or maybe some of the ideas that are included in any pending leg?

from Laura Tabor to everyone: 10:50 AM

I have another commitment at 11:00 - would you like us to continue adding stickies as we have time following the call?

from Alyssa Bonini, DLCD to everyone: 10:54 AM

I need to step away for another meeting at 11. Thank you all for the opportunity to participate this morning

from Jessica Reichers to everyone: 10:55 AM

Hi, Sidney! Thanks for the question about pending legislation. The Energy Strategy development is working apart from the legislative sessions, and the final strategy is not due until after session. So, this group is not focused on current legislation. We recognize this can be challenging, but to the best of our ability the group should be discussing policy actions that you all think are needed. This will inform ODOE as we work to develop the draft recommendations.

from Joni Sliger, ODOE to everyone: 10:57 AM

Hi Laura, thanks for the question about the Miro board. It will be 'view-only' after today's meeting, but you are welcome to revisit it and send us any additional thoughts you might have after this meeting through the comment portal.

from Hugh Arceneaux, ODOE to everyone: 10:59 AM

Here is the link to the comment portal, for reference: <https://odoe.powerappsportals.us/en-US/energy-strategy/>

from Jess, Rogue Climate she/they to everyone: 11:01 AM

Apologies, I have to leave for another meeting. Thank you ODOE staff for facilitating us

from Jessica Reichers to everyone: 11:01 AM

Thanks, Jess!

from Nataliya Stranadko to everyone: 11:13 AM

I think it's hard for folks to multitask and focus on the white board writing and hear and answer questions. The effective way would be to provide a summary of the responses before the next meeting and ask to prepare clarification for the next meeting. So, we can see a full picture and discuss it.

from Shanna Brownstein to everyone: 11:17 AM

that's why utility should own/operate infrastructure

from Shanna Brownstein to everyone: 11:27 AM

I had an intern do a case study of the beaverton microgrid project at the police station when I was at PGE. I'll see if I can find it and will share it with facilitators.

from Jessica Reichers to everyone: 11:28 AM

Thanks, Shanna!

from Shanna Brownstein to everyone: 11:28 AM

I have to drop. thanks everyone!

from Jessica Reichers to everyone: 11:28 AM

Thanks for joining, Shanna!

from Edith Bayer ODOE to everyone: 11:33 AM

Hi Nataliya - thanks for your comment. We will be synthesizing what we see and hear today, so this is not our only pass at these issues. We are working here to provide ways to make sure we can popcorn all of the ideas folks have in their heads given limited time to talk through it all.

from Anahi Segovia Rodriguez to everyone: 11:36 AM

Stepping away for a second

from Alec Shebiel to everyone: 11:39 AM

My Miro seems frozen to unmute - the concerns are state mandates to COUs because they are mandates to IOUs. We are member owned, and that means we are responsive and accountable to our members. For example, UEC already does GETS, we don't need to be mandated to.

from Jason Sierman ODOE to everyone: 11:39 AM

Similar to Sidney's thought :) ... for all who may have "more" to say about barriers to RTOs or any other topic - please, please share more via the comment portal? Here is the link to the comment portal, for reference: <https://odoe.powerappsportals.us/en-US/energy-strategy/>

from Jessica Reichers to everyone: 11:40 AM

Alec, let me try to unmute you.

from Anahi Segovia Rodriguez to everyone: 11:40 AM

back

from Alec Shebiel to everyone: 11:40 AM

No worries.

from Jessica Reichers to everyone: 11:54 AM

Some barriers can be opportunities as well.

from Robin Hayakawa, Central Oregon LandWatch to everyone: 11:58 AM

Thank you ODOE!