Clean Energy Plan (CEP) Engagement Series

June 2023 Meeting Notes

Friday, June 23, 2023, 1:00 -4:00 pm Pacific Time

These notes were synthesized and summarized by E Source, PacifiCorp's meeting facilitation partner.

Executive Summary

There were 54 people in attendance, including members of the public and PacifiCorp representatives, at the third iteration of the CEP Engagement Series meeting. The virtual meeting, which was hosted via the Zoom platform, provided a holistic overview of the planning and components of the Clean Energy Plan, as well as the pathways to realizing reduced emissions prescribed in HB2021. To maximize accessibility, the meeting was recorded for those who could not attend and Spanish and ASL interpretation / translation was provided.

The following is a summary of the content and feedback received during the 3-hour public meeting.

Ongoing Objectives

1. Brief on Clean Energy Plan (CEP)
2. Socialize clean energy pathways
3. Deepen understanding of:
    - Community Benefit Indicators (CBIs)
    - Community Benefits & Impact Advisory Group (CBIAG)
    - Resilience
    - Community-Based Renewable Energy (CBRE)

Slides and audio recording available in English below:

Clean Energy Plan Engagement 3 Series Slides - English

Clean Energy Plan Engagement 3 Series Recording Part 1 and Recording Part 2

Opening

PacifiCorp's Stephanie Meeks welcomed participants to the meeting and handed it off to E Source's Lisa Markus, who covered meeting logistics and introduced the agenda.

Clean Energy Plan

PacifiCorp's Joelle Steward began the discussion with an overview of the Clean Energy Plan and the filing that was made on May 31st. In this overview, time was spent highlighting the span of PacifiCorp's service area and the planning that is occurring simultaneously throughout those systems.

Having a large footprint across the West as a multi-state utility, PacifiCorp is currently serving nearly two million customers across Oregon, California, Idaho, Utah, Washington and Wyoming. To bring power to every home and business in the service area, PacifiCorp developed an extensive and diverse portfolio of generation, resources, transmission, and distribution infrastructure. PacifiCorp continues to decarbonize

its entire system and has a goal to be emissions free by 2050. Understanding that decarbonization will require the development of new technologies to ensure reliability, PacifiCorp is actively exploring viable options to help achieve this.

While PacifiCorp's efforts are experienced throughout the multistate network, Oregon has specific policy-driven decarbonization efforts mandated in HB2021, and the Clean Energy Plan has accelerated the efforts. Currently PacifiCorp's baseline emissions are 8.9 MMT carbon dioxide equivalent, Oregon's clean energy requirement must meet 20% below the baseline by 2030, 90% below the baseline by 2035, and 100% below baseline by 2040. PacifiCorp's analysis shows that an 80% reduction in emissions by 2030 is possible under the Integrated Resource Plan.

There are seven components to PacifiCorp's Oregon Clean Energy Plan

- Community Engagement
- Community Benefit Indicators
- Resiliency
- Community-Based Renewable Energy
- Resource Planning
- Greenhouse Gas Emissions Analysis
- Action Plan

The Clean Energy Plan identifies the action plan for PacifiCorp. The action plan contains near-term actions that have been identified to help reach the target and the goals of HB2021. This is an initial plan that will require more work to help this plan develop.

Action Plan

- Continued **community engagement** on key Clean Energy Plan topics and other program and planning processes
- Monitor and evaluate **Community Benefit Indicators**, with continued refinement
- Develop a working definition of resiliency, resiliency goals, and metrics for **system and community resilience**
- Update the **Community Based Renewable Energy Potential Study and Community-Based Renewable Energy Action Plan** following stakeholder engagement
- Develop a straw proposal for a **Community Based Renewable Energy Project Pilot** focused on a renewable energy source paired with battery energy storage to develop community resilience hubs
- Conduct a **survey to better gauge future interest** in different types of Community-Based Renewable Energy projects
- Look for ways to leverage other **public funding sources**

Action Plan

- Complete the **2022 all-source request for proposals** process
- Conduct a new **2023-2024 all source request for proposals**, expected to solicit, acquire, and evaluate specific energy supply resources through the end of 2028
- Evaluate appropriate criteria for assessing bids in **specific small-scale renewable resource request for proposals**
- **Expand transmission capacity** to interconnect renewable resources from across the West
- Develop **operational procedures to dispatch natural gas resources** to serve PacifiCorp's Oregon customers to meet emissions requirements until 2040, while pursuing new non-emitting technologies
- Continue to work on the development of an allocation methodology that provides options to **meet each state's energy policy as new resources are developed**

Resiliency

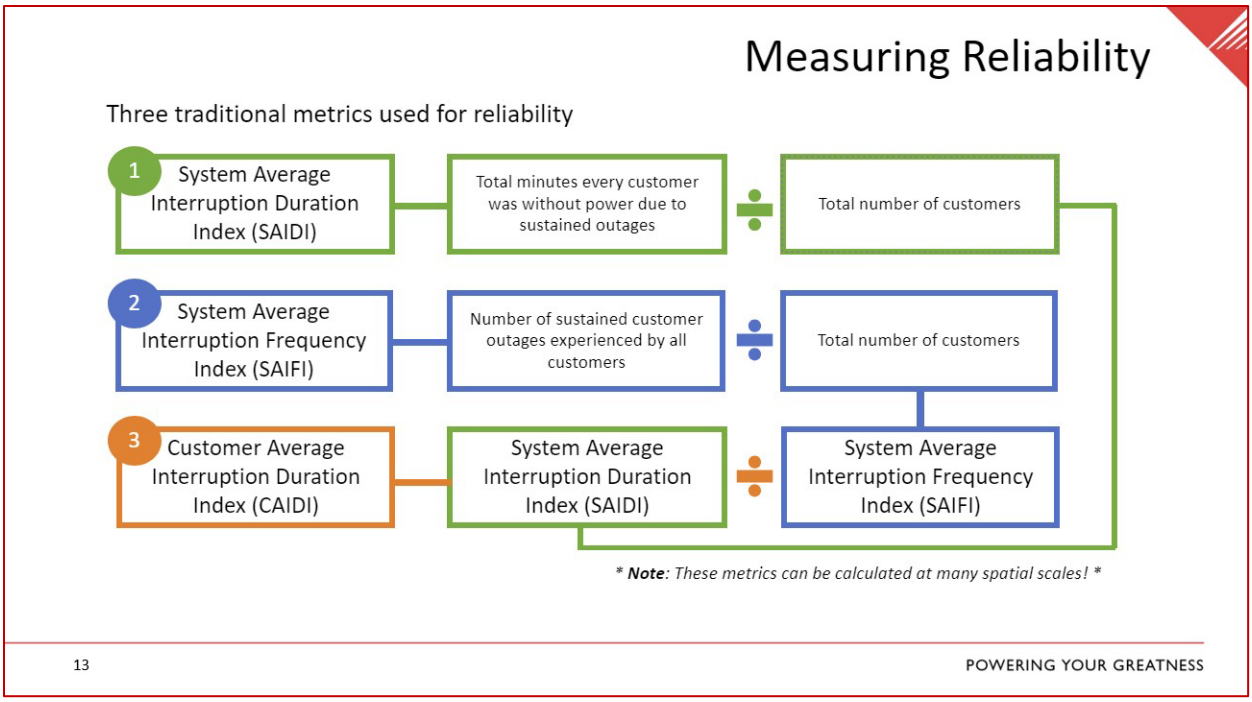
PacifiCorp's Kevin Benson discussed the resiliency portion of the Clean Energy Plan including:

- Goals
- Progress
- Next steps
- Timeline for completion

He started by clearly defining resilience and reliability. This section attempts to answer the question: "*How can we go from the traditional reliability metrics to a more comprehensive look at resilience*?"

It is important to establish the definitions and differences between the two. Reliability is defined as the quality of being trustworthy or of performing consistently well. Reliability in energy refers to the availability of the electric system when it is needed. Resilience, on the other hand, is defined as the capacity to withstand or to recover quickly from difficulties (i.e., toughness). Resilience in energy is the preparedness of the system and its ability to cope with various hazards that can disrupt electricity.

There are three traditional metrics used for reliability. This is the starting point for coming up with a utility resilience score. Together these metrics give a comprehensive view of the day-to-day performance of the grid.



As an important note, there are a couple of things that these traditional metrics don't consider, so PacifiCorp has shifted to also include census tract data to incorporate more community resiliency data. By taking the reliability data and splitting it to the census tract level, PacifiCorp has the ability to start incorporating community considerations into the resilience score calculations.

PacifiCorp strives to bring in community resiliency characteristics by using the National Risk Index (NRI) score, which is used by FEMA. The NRI includes information on social vulnerability, resiliency, susceptibility to natural disasters, and other pertinent information.

The NRI has two components. First are Baseline Resilience Indicators for Communities (BRIC) that look at the community as an institution or entity. BRIC is calculated using 49 variables in these categories:

- Human Well-Being/Cultural/Social
- Economic/Financial
- Infrastructure/Built Environment/Housing

- Institutional/Governance
- Community Capacity
- Environment/Nature

In addition to community resiliency, the NRI also includes a social vulnerability score. Instead of looking at a location or community as a whole institution, the social vulnerability score brings in the characteristics of the people that live there, including socio-economic variables, such as:

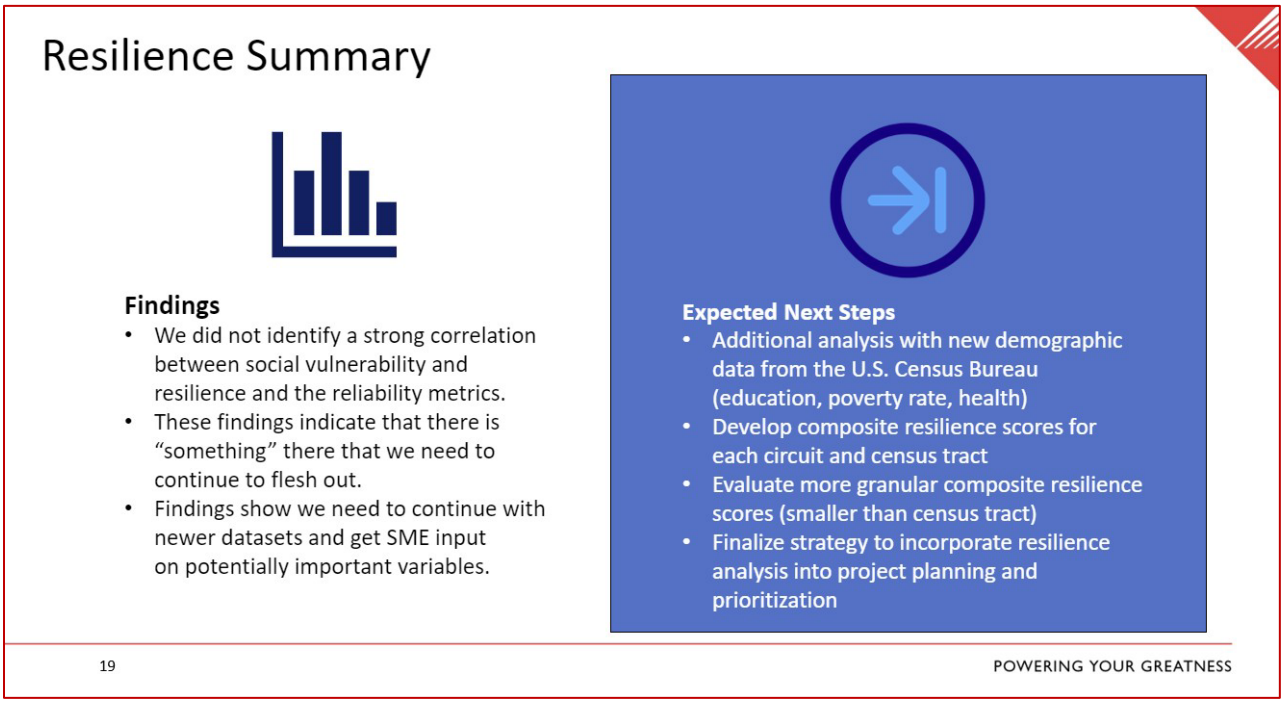
- Wealth
- Race
- Age
- Ethnicity
- Special Needs
- Gender
- Service Sector Employment

To get a comprehensive look at community resilience, PacifiCorp combines the social vulnerability and community resiliency scores with the NRI, then applies these to each census tract as follows:

Census Tract I.D.:	County:	SAIDI:	CAIDI:	SOVI Rating:	SOVI Score:	RESL Rating:
41057960100	Tillamook	4,126	239	Relatively Moderate	34.86	Relatively Moderate
41043030300	Linn	3,595	494	Relatively Moderate	33.08	Relatively Moderate
41011000200	Coos	3,334	459	Relatively High	35.16	**Relatively Low**
41011001000	Coos	3,095	1,031	Relatively High	37.39	**Relatively Low**
41047010600	Marion	2,967	473	Relatively High	35.64	Relatively Moderate

CAIDI = Customer Average Interruption Duration Index
SAIDI = System Average Interruption Duration Index
RES = Resilience
SOVI = Social Vulnerability

Resiliency work findings were defined, summarized and framed in expected next steps as follows:



In addition to PacifiCorp having completed a utility and community resiliency analysis, other progress milestones are:

- Developing composite community-utility resilience scores: target completion 8/1/23
- Completing major event root cause analysis for high-risk areas: target completion 12/1/23
- Incorporating community-utility resilience scores and risk drivers into CEP program planning: target completion 3/1/24

Chat Questions & Comments:

- John Charles asked "What is the motivation for this analysis? Is it a legislative mandate?
    - PacifiCorp's Kevin Benson responded that the resiliency analysis is an extension of existing legislation.
- John Charles asked, "Will it replace reliability as a standard?"
    - PacifiCorp's Kevin Benson responded that PacifiCorp will continue reporting on reliability. Resiliency will be factored in in addition to that, as PacifiCorp still has to do the reliability compliance tracking. That is, it is in addition to, rather than replacing.
- Kate Ayers asked, "How will community members or organizations be included in this process? How will their perspectives on resilience be implemented into the plan?"
    - PacifiCorp's Kevin Benson responded that PacifiCorp uses a few different forms to communicate. This CEP Engagement Series is one example, but PacifiCorp has also met with the Community Benefits Indicators Advisory Group (CBIAG) to get input and feedback and are always looking for additional opportunities to go out into the community to actively seek input from stakeholders in the community. Regarding implementation, it initiates with documenting and reviewing the feedback received

compared to the objectives and timelines defined in the Clean Energy Plan, and then incorporates that in based on where the process is.

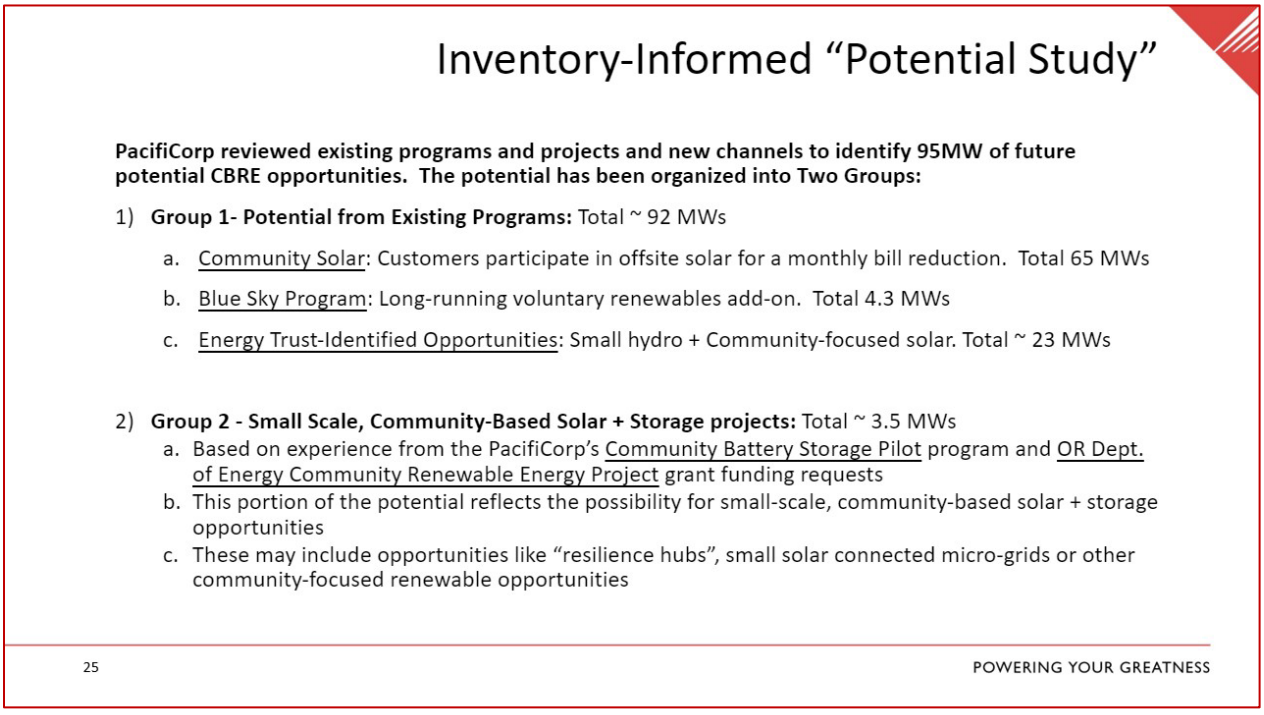
Community-Based Renewable Energy (CBRE)

PacifiCorp's John Rush provided a background of what was filed in the Clean Energy Plan related to community-based renewable energy, the focus on a CBRE Resilience Pilot, a survey to explore community interest in CBREs, and details on next steps.

Community-Based Renewable Energy projects are defined as one or more energy systems, that may be combined with microgrids, storage systems, demand response measures, or energy related infrastructure that promotes climate resiliency. CBRE projects must either directly benefit communities through engagement and/or ownership, or through increased resiliency and community stability.

One of the key parts of CBRE projects is to outline the potential in the community-based renewable energy space within PacifiCorp's service area. The Initial CBRE Potential Study identified ~95 MW of future potential CBRE capacity over the period from 2024-2030. What is unique about the benefits of community-based renewable energy is the potential to provide local resiliency.

The requirement set forth was to conduct a potential study on what resources PacifiCorp sees as CBRE opportunities moving forward.



The identified highlights and themes that came out of the action plan are as follows:

- Resilience Partnership with the Energy Trust of Oregon

    - PacifiCorp hopes to complement and support both existing program offers and the energy resiliency program offerings under development by Energy Trust of Oregon
- Federal Grant Opportunities
    - Continue to look for opportunities to leverage external funding for CBRE projects to decreased energy burden, access to low-cost capital, among other benefits
- Future Request for Proposals
    - The company intends to issue a request for proposals for small-scale renewable projects, to which CBRE projects may qualify
- CBRE Grant Pilot Straw Proposal
    - PacifiCorp plans to develop a straw proposal for potential expansion of the existing Community Resilience Battery Storage Grant Pilot
- Updated CBRE Potential Study and Action Plan
    - PacifiCorp's actions above will inform an updated CBRE Potential Study

Pacific Power has an existing pilot program that provides battery storage for critical facilities in Oregon, called the Community Resiliency Battery Storage Pilot. This was first proposed in 2018 and aims to support the study of potential installation and use of batteries for critical facilities for resiliency.

The pilot has two elements:

- Offering #1: Feasibility studies to assess and recommend possible battery systems (and pricing)
- Offering #2: Grant awards to fund purchase and installation of a battery system

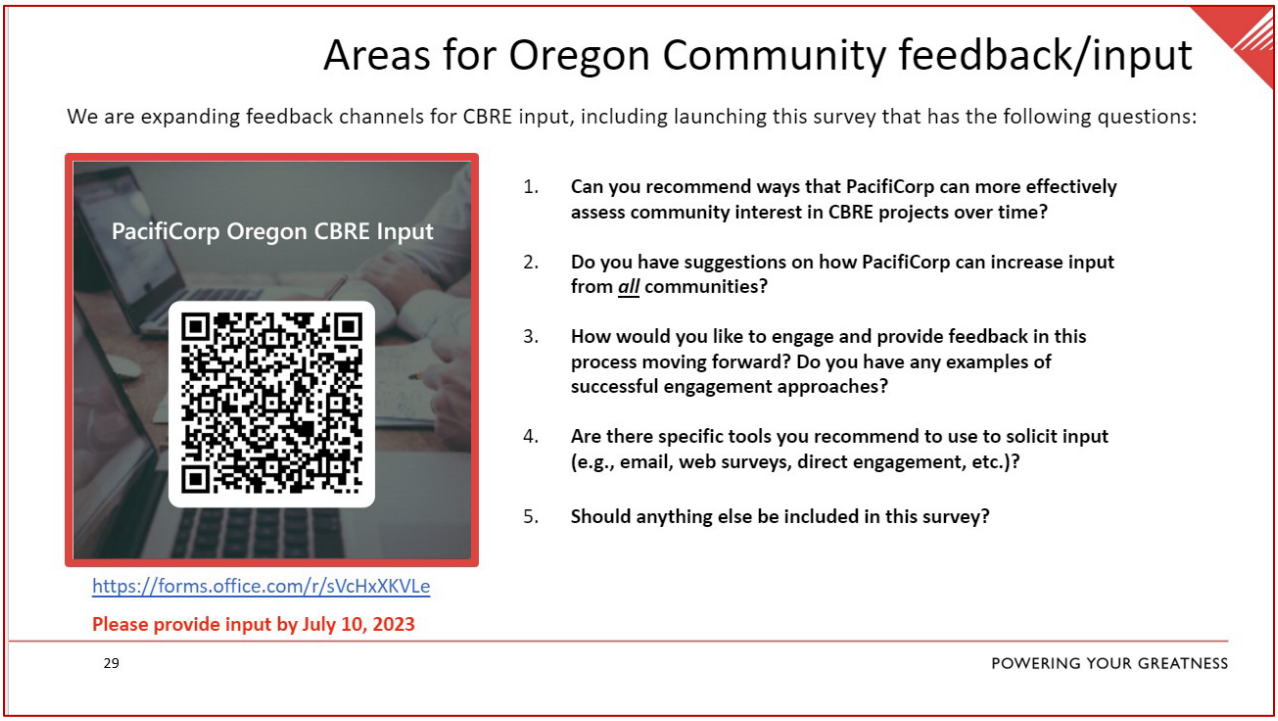
The Straw Proposal for the grant pilot expansion goal is to extend existing activities by adding a CBRE element to the existing pilot.

Chat Questions & Comments:

- Elise Burke asked, "Are these just for residential solar systems or for larger facilities like community solar projects with storage?"
    - PacifiCorp's John Rush answered that these would most likely not be residential. Critical facilities are considered community focused, such as police stations, fire stations, areas where there are critical communications in the event of a power outage.
- Elise Burke asked, "Would universities/schools be considered critical?"
    - PacifiCorp's John Rush answered that it depends. There are communities where schools would be considered a gathering or evacuation site, those locations could then be considered critical.
- Hannah Cruz asked, "Curious if this looks at sites with current backup generators to replace them or sites don't but might become community gathering spots during a disaster event?"
    - PacifiCorp's' John Rush answered that the initial take on current battery storage effort was focusing on how the battery plays with an existing diesel backup generator. There is a study that was published that walks through this in great detail. **PacifiCorp will share this study**. The study can be found on the OPUC Website for Docket UM 1857 – Link here: um1857had133018.pdf (state.or.us)

Moving forward, the biggest question is how to gauge community interest in CBRE opportunities and determining the best way to engage with communities to get meaningful input.

In addition to this Clean Energy Plan Engagement Series public meeting, PacifiCorp strives to provide expanded engagement methods to better capture feedback and input. To this end, PacifiCorp is requesting feedback through an online survey - the PacifiCorp Oregon CBRE Input Survey to better serve customers and residents. The deadline to submit feedback is July 10, 2023.



As a recap of the action plan through to the end of the 2023 year, below are the outlined next steps and commitments:

1. Continued Assessment of Needs and Opportunities (Expand the CBRE Potential Study)
    - Continue to advance CBRE initiatives through community input and engagement groups
    - Develop and conduct a survey to further assess community interest in CBRE projects and initiatives
    - Update CBRE Action Plan based on continued learnings on CBRE project development
2. Develop straw proposal for expansion of the Community Resilience Battery Storage Pilot focused on community resilience hubs and opportunities for better CBRE understanding
3. Explore opportunities to leverage public funding to advance CBRE opportunities
4. Build tools and awareness to assist communities and stakeholders in connecting to CBRE processes, initiatives, and programs as they develop

Chat Questions & Comments:

- Micah Desilva asked, "Regarding #3, will this process be documented in any planning materials?"
    - PacifiCorp's John Rush answered that PacifiCorp is pursuing a large level funding, including pursuing opportunities to make major resiliency upgrades across the West. It is

currently very early in the grant process, so there is a lot of waiting. There is no documentation at this point because it is currently in process.

Resource Procurement

PacifiCorp's Tom Burns presented on resource procurement, starting with the IRP work that has been done, along with the recommendations that have been made over the last year. As a natural outgrowth of PacifiCorp's decarbonization trajectory over the past several IRP cycles, PacifiCorp's 2023 IRP positions the company to comply with HB2021's decadal requirements.

Over the 20-year planning horizon, PacifiCorp expects to add the following:

- 9,114 MW of new wind generation
- 7,855 MW of new solar generation
- Over 1,000 miles of new transmission assets to access renewable generation
- 500 MW of advanced nuclear generation from the NatriumTM demonstration project,
    - Plus, an additional 1,000 MW of advanced nuclear generation
- 1,240 MW of non-emitting peaking resources
    - Developing the last two technologies will be critical to manage the transition from our coal/gas resources and minimize impacts to our employees and communities

PacifiCorp's 2023 Integrated Resource Plan (IRP) provides the basis for analyzing HB2021 requirements. This system-wide portfolio ensures that Oregon customers retain the benefits of multistate system planning and operations, which provides both access to West-wide resources and markets and mitigates risk through the delivery of reliable energy from a broad range of lower-cost resources.

Small-Scale Renewable (20 MW or less) requirement is 10 percent of the company's generation portfolio for Oregon. As a result of HB2021, these small-scale renewables have to be in service by 2030.

- Approximately 4.6 percent of this requirement may be met with existing small-scale renewable resources
- PacifiCorp will need to procure an additional ~5.4 percent, or 490 MW
    - This gap is anticipated to grow to 802 MW

Currently PacifiCorp has an open request for proposal (RFP). Small-scale renewables were invited to bid as part of this RFP. This proposal aligns with the needs identified in the 2023 IRP, and is designed to acquire and evaluate specific energy supply resources through the end of 2028. In addition to this, PacifiCorp plans to issue a small-scale request for proposal because these resources must be procured by 2030.

Chat Questions & Comments:

- Joshua Basofin asked "Can you talk about QFs as small-scale resources? Are they included in the small-scale request for proposal, and do they count toward the 10% requirement?"
    - Pacificorp's Tom Burns responded that QFs less than 20MW qualify towards the SSR requirements. There are special negotiated prices already in place, so there is not a need for them to participate in the RFP process.
- Shelby Westerberg asked, "What does QF stand for?"

    - Natailia Ojeda (CEP Engagement Series participant) responded in the chat that QF stands for “qualified facilities”.
- E Source’s Lisa Markus shared this resource in relation to qualified facilities: https://www.pacificpower.net/savings-energy-choices/customer-generation/qualifying-facilities.html

This marks the first small-scale specific RFP. This being the first one ever, PacifiCorp is highly encouraging feedback and input. PacifiCorp plans to use Utility Scale request for proposing as a guideline for what is being proposed in the small-scall request for proposal.

As an important note to meet the need, it is crucial for all resources to have a studied interconnection with transmission services as part of the cluster study process. All new resources are required to have an interconnection study that outlines an interconnection schedule consistent with the proposed commercial operation date of the resource. PacifiCorp’s small generator (20 MW or less) interconnection process is identified in its OATT.

Looking forward to the timeline of the work being done, PacifiCorp’s Tom Burns discussed the details of the next steps.

Request for Proposals (RFP) Process Steps	Standard all-source (AS) RFP schedule (hypothetical)	Small-scale renewable (SSR) proposed – starting 9/30/23	Comment
Open Oregon docket and notify market	06/30/2023	09/30/2023	Start later, shorter duration
Hire Independent Evaluator (IE)	09/02/2023	10/14/2023	Leverage prior RFPs
Final RFP with Oregon commission	12/09/2023	11/25/2023	Informational; public comment completed in CEP engagement
Issue RFP to market and publicize	03/24/2023	11/26/2023	More time for bid prep
Cluster study window closes	05/16/2024	05/16/2024	Same
Cluster study results	11/12/2024	11/12/2024	Same
Benchmark and market bids received	11/21/2024 01/12/2025	11/27/2024 11/27/2024	Combined, single deadline
Bid evaluation complete	04/07/2025	02/05/2025	Avoids benchmark process and PLEXOS durations
File IE report and FSL with Oregon commission	06/23/2025	03/17/2025	No sensitivities; no public comment
Complete contract negotiations	11/15/2025	04/07/2025	Standard contract
Guaranteed commercial operations date	12/30/2028	12/30/2028	

Chat Questions & Comments:

- Elise Burke asked, “What happens to bids/RFPs if the cluster study requirements aren't reached?”
    - PacifiCorp’s Tom Burns responded that if the requirements aren’t reached, it will have to be studied independently.

Contrasting the difference between the utility scale request for proposal and the proposed small-scale request for proposal. Some areas that input is requested are outlined below.

Process Step	AS RFP Duration starting Hypothetical	SSR Duration – proposed starting 9/30/23	Comment
IE hiring process	64 days	14 days	No RFP to select IE
Regulatory approval process	217 days	42 days	Includes IE selection process
RFP issuance to bid receipt:	294 days (market bids) →market bids received 52 days after benchmarks	367 days	More notice time for bidders to participate in the cluster study.
Bid evaluation	162 days (all bids) →after separate 51 day benchmark evaluation process	70 days	Benchmark and market bids evaluated together.
Regulatory approval for FSL	82 days	40 days	Simple filing with IE Closing Report
Contract negotiation	77 days	63 days	Relies upon standard contract
Development/ construction period	1,184 days (~3.25 years)	1,322 days (3.6 years)	More time for development and construction

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Process Step	2022AS RFP	SSR - proposed
Bid Fees	Bids up to 5 MW: $1,000 per MW base bid Bids > 5MW: $15,000 per base bid fee Free and reduced-price bid alternatives available	To be determined after incorporating feedback. All PPA bids must be fixed price, 25-year term
IE	PA Consulting contract > $1m	No change
Security	Project Development Security: $200.00/KW Performance Security: $100.00/KW LC, cash or parent guarantee	To be determined after incorporating feedback.
Price Scoring	Provided by PLEXOS	Provided by excel cost model.
Non-price Scoring	7% of non-price score (1.7 out of 25 points) attributable to equity criteria (local labor, MBE/WBE contractors and suppliers) 20% attributable to contracting viability 40% attributable to project deliverability	To be determined after incorporating feedback.
Contracting	Negotiated based on proforma redlines	Standard form

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Chat Questions & Comments:

- Joshuan Basofin asked, “Is it the same security requirement for small-scale facilities?”

    - PacifiCorp's Tom Burns responded that this parameter is part of what PacifiCorp is seeking feedback on.
- Hannah Cruz asked, "Does the all-source request for proposal provide consideration on location in or proximity to Oregon?"
    - PacifiCorp's Tom Burns responded that the all-source request for proposal is exclusive to the system. It does not favor weight or discriminate based upon the state of location. HB2021 does not require any of the resources to be located in Oregon, and PacifiCorp would also appreciate guidance on the topic.
- Lukas Tejada asked, "Are you open to bids with a portfolio of projects with price being determined by how many are accepted?"
    - PacifiCorp's Tom Burns responded that PacifiCorp is still seeking guidance on how to treat co-located resources. If talking about resources that aren't co-located, there could be difficultly in considering an economy of scale because each of these are individual bids that are not tied together.
- Elise Burke asked, "Would the weight of that RFP have any scoring according to serving the community that it is located in, even if it isn't in Oregon?"
    - PacifiCorp's Tom Burns responded that there are elements of this that all come into play from the development of the project from the inflation reduction act. In addition to this, considering how to weight the non-scoring equity factors.

Public Comment

- JP Batmale asked how PacifiCorp sees the relationship between small scale renewable energy and community based renewable energy projects, and meeting that portion of the Clean Energy Plan?
    - John Rush responded that this is not a one for one, or a clear and defined relationship between the two. Taking a step back from the rules and regulations of the legislation, there is a mandate that the small-scale renewable has a 10% target. There are specific requirements to qualify as a small-scale renewable. On CBREs, there is a community centric definition, though there is no target against CBREs. It is less mandated which means CBREs have a lot more room to move. This engagement process and the evolution of this will help to bring a better understanding of the Venn diagram of how small-scale renewable and community based renewable energy.
- Micah DeSilva commented that Pacificorp's 2,365-mile Energy Gateway Transmission Expansion Plan is expected to cost $11 billion through 2027, with about a billion dollars in capital expenditures on transmission expected in 2023. The project is intended to facilitate the renewable transition while still ensuring reliability for customers, with at least 1,615 miles (68%) of the projects slated for development being singled out in the IRP as direct responses to the reliability shortfalls resulting from increased dependence on non-dispatchable renewable resources. Are the costs of this new transmission infrastructure accounted for as part of the cost of renewable energy, or are they accounted for separately?
    - PacifiCorp's Rick Link responded that the answer is yes and yes. The gateway transmission projects help facilitate connectivity across PacifiCorp's broad footprint. The transmission helps enable and facilitate the expansion of a diverse set of low or non-emitting resources across the footprint and to do that on a more cost-effective basis. This is not to say that

an individual project gets assigned the specific cost of the transmission, it is handled in the planning collectively.

- Joshua Basofin asked if there are things Pacific Power can do to foster the broader ecosystem of small-scale renewable projects?
    - **PacifiCorp's Tom Burns responded that PacifiCorp would have look further into this and what exactly can be done. Addressing these challenges is a considerable problem.**

Next Steps – External Engagement for 2023

PacifiCorp's Stephanie Meeks closed the meeting and discussed the upcoming engagement opportunities. Participants were also reminded that this recording and public notes will be made available.