



# Distribution System Planning Work Group Announcements

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November 15, 2021

This update includes four announcements about the Distribution System Planning Technical Work Group.

1. At the most recent Technical Work Group meeting in August, Staff noted this Wednesday, November 17, 2021, as a date for the next potential meeting of the group. **However, Staff is cancelling this meeting.** The next scheduled meeting is January 19, 2022 from 1:00 p.m. – 3:00 p.m. Pacific.
2. **Instead, Staff asks Technical Work Group participants to bring questions to the Staff Workshop scheduled for December 10, 2021,** from 9:00 a.m. – 12:00 p.m. Pacific. While the December 10 Workshop will serve first as a venue for parties who wish to provide input as an alternative to written comment, Staff anticipates it will also serve as a forum to discuss the utilities' Part 1 filings, and thus any Technical Work Group discussions. Staff anticipates sharing an agenda for the December 10 Workshop in the next week.
3. Included at the end of this update are notes from the August 25, 2021, Technical Work Group meeting. These were not posted to the docket after the meeting. Staff only recently realized this oversight, and apologizes for the omission.
4. At the August meeting Staff proposed revisions to the Group's focus and scope, as well as areas that working subgroups may explore in greater depth. Staff proposed these changes in response to previous group discussions.

Moving forward the Group will continue to meet, though it will be less technically focused. The purpose will continue to be a forum to identify, articulate, discuss, and when possible, resolve ~~technical~~ questions that arise in the course of the utilities preparing their plans. ***These questions may be, but are not exclusively, technical in nature.*** [Red font notes revised language.]

The primary goal will continue to be to try to answer questions, solve problems, and find solutions to barriers that would otherwise inhibit completion of the utility plans. This goal continues to be distinct from other docket activities in which raising awareness, developing background, or providing education may be primary goals.

Moving forward, the group will be known as the of *DSP Work Group*. An updated working draft of the *DSP Work Group Plan*, which reflects these changes, is included at the end of this update.

Finally, Staff proposed three areas of focus for working subgroups, through June 2022:

- I. A working subgroup to focus on demographic and socioeconomic data, useful energy planning metrics, and quantifying measures and data sources for equity. Consider in this effort identifying

preferred sources of public data that include demographics and other details that adequately characterize our communities.

II. A working subgroup to establish common definitions for distribution system planning discussions.

III. A working subgroup to focus on practices for handling public accessibility of data, focusing specifically on the distribution system context (e.g., grid-level data concerns).

Staff notes that with a de-emphasis in technical focus, other participants in Docket No. UM 2005 may now be interested in joining the Work Group. If you are interested, please contact Nick Sayen as noted below.

Questions and comments can be directed to Nick Sayen via email at [nick.sayen@puc.oregon.gov](mailto:nick.sayen@puc.oregon.gov) or by telephone at 503-510-4355.

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# UM 2005 Technical Work Group

## August 25, 2021 Notes

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November 15, 2021

Below are notes from the August 25, 2021, Technical Work Group meeting. This document was not posted to the docket after the meeting. Staff only recently realized this oversight and apologizes for the omission.

### Attendees:

- PUC
  - Nick Sayen, Staff
  - Garrett Martin, Exec. Office
- Oregon DOJ
  - Natascha Smith
- Energy Trust
  - Spencer Moersfelder
  - Gina Saraswati
  - Jeni Hall
- PacifiCorp
  - Erik Anderson
  - Jonathan Connelly
  - Heide Caswell
  - Adam Lint
- OSSIA
  - Angela Crowley Koch
- PGE
  - Misty Gao
  - Shadia Duery
  - Rich George
- Renewable NW
  - Micha Ramsey
- Idaho Power
  - Alison Williams
  - Marc Patterson
  - Lisa Nordstrom
  - Jim Burdick
- TeMix
  - Stephen McDonald

### Questions/clarifications/etc. on follow up materials from June 30 & July 28 meetings

There were no questions or clarifications on the follow up materials from the June 30 or July 28, 2021, meetings.

### Unresolved questions from the July 28 meeting

The questions below were originally to be discussed at the July 28 meeting, but were not due to time constraints. After the July meeting Staff circulated draft responses (**bolded blue** font). The questions and draft responses were reviewed during the August 25 meeting, and the responses adequately addressed the questions.

### Long-term Plan

1. See requirement 4.4.c which focuses on the smart grid investments:

*4.4 This section of the Distribution System Plan will consist of the utility's long-term distribution system investment plan and inform broader goals related to maximizing reliability, customer benefits, and efficient operation of the distribution system. A utility should include:*

*c) Smart Grid investment opportunities*

*i) List and describe smart-grid opportunities that the utility is considering for investment over the next 5-10 years and any constraints that affect the utility's investment considerations*

*ii) Describe evaluations and assessments of any smart-grid technologies, applications, pilots, or programs that the company is monitoring or plans to undertake"*

Does Staff and the TWG see these requirements as a way to update each activity from the previous smart grid report and talk about new activities at a granular level; or to talk about the umbrella activities where several smart grid initiatives work together to drive value?

**Response:**

**Staff notes this question was submitted with the additional comment that *these requirements represented the bulk of the smart grid report content and usually focused on providing updates to on-going activities in the space.***

**In order to respond to requirement 4.4c, a utility does not have to include the bulk of the smart grid report with similarly granular content. However, updating any on-going activities which are also key aspects of the utility's long-term vision and plan, would be helpful to stakeholders.**

**Staff also notes that requirement 4.4b focuses on planned investments and is more prescriptive in detail and content. As a contrast, requirement 4.4c focuses on opportunities that the utility is considering for investment and does not include the same level of prescription and detail; a higher-level discussion (the question notes *umbrella activities where several smart grid initiatives work together to drive value* as one such example) would be responsive to the requirement.**

2. It would be helpful to review the actual order of the steps and the content in the long-term plan. There is a logical order that suggests we have a vision articulated in phase 1, get feedback and incorporate into phase 2 and the fold into long term plan.

**Response:**

**Staff notes that the sequencing of the filing of Parts 1 and 2 in the first DSP Plan was necessary to accommodate existing utility planning processes, and to provide enough time to adjust to new practices resulting from Order 20-485. However, this sequencing resulted in the Long-Term Plan (5-10 year) being filed prior to the Near-Term Action Plan (2-4 year).**

**This partly confused the logic of the underlying planning mechanics: a comprehensive review of the current distribution system, a holistic forecasting process, identifying system faults, identifying solutions to those faults, proposing investments needed in the near-term to**

execute those solutions, coupled with a long-term plan for the distribution system, all of which should include a new level of community engagement.

It is anticipated that future DSP Plans will be filed in one step, will follow the more linear planning mechanics as noted above, and thus will place the Long-Term Plan in more appropriate context.

Utilities should file their Long-Term Plan in Part 1 in October 2021. Should the analytical exercises done to prepare Part 2 (to be filed in August 2022) result in necessary revisions to the Long-Term Plan (for example shifting the timing of investments, or the relative priorities of investments), utilities should update their Long-Term Plan when filing Part 2.

### New questions for the August 25 meeting

Below are new questions received for discussion on August 25.

1. Some discussion/clarity about the hosting capacity maps would be helpful. Specifically, the difference between what is required in the Phase 1 report versus what is outlined in Stage 2 in the guidelines.

Figure 2 below shows published hosting capacity maps as part of Stage 2 (2023 and beyond):

Figure 2 Hosting Capacity Analysis		
Stage 3		Comprehensive hosting capacity considering both distribution and transmission.
		Increased level of detail regarding distribution constraints, asset performance, and DER performance metrics. Address emerging technology development.
		Maps indicate node/section-level hosting capacity.
		Update and publish hosting capacity maps and datasets sufficiently accurate and frequent to streamline interconnection.
		Conduct system-wide hosting capacity evaluations to inform Grid Needs Identification.
Stage 2		If determined through Docket UM 2111, conduct hosting capacity analysis inform stakeholders of potential interconnection challenges, or replace portions of interconnection studies; publish <u>hosting capacity maps</u> with greater detail over time. Update areas with greater/faster DER adoption more frequently.
		Include distribution-level impacts to the substation and transmission system.
		Conduct hosting capacity evaluations to inform Grid Needs Identification.
Stage 1		Conduct a system evaluation to identify areas of limited DER growth.
		Provide a plan to conduct hosting capacity evaluations in the near-term which may inform Grid Needs Identification, inform stakeholders of potential interconnection challenges, or replace portions of interconnection studies. Plan may address options that may provide more approachable and instructive data for communities.
	2021-2022	2023 and beyond

In the same section, the Guidelines also say:

“Under these Guidelines, for initial Distribution System Plans, each utility should conduct system evaluations to identify generation constrained areas where it is difficult to interconnect DERs without system upgrades. Each Utility should present the results through an unredacted map that the utility should make available on its website on a continuing basis.” <emphasis added>

A reasonable interpretation of the objective of the Stage 2 requirement is to enhance the original map. It would be great to discuss this further and clarify this interpretation, and expectations.

**Discussion in meeting:** In discussion Staff confirmed that the DSP Guidelines call for presentation of areas where it is difficult to interconnect DERs through a map on the company website. This is intended as an incremental step, as the data (and associated analysis and processing of that data) underlying this evaluation is already publicly available on OASIS as a result of UM 2000 and UM 2001 proceedings. Staff noted the model for this was the PGE Generation Limited Feeder map.

The DSP Guidelines also call for utilities to develop cost estimates for varying levels of hosting capacity analysis. Benefits of hosting capacity analysis will be discussed as part of the broader conversation on interconnection reform in Docket No. UM 2111. Staff expects a Commission decision regarding hosting capacity analysis, including any maps, will be made in UM 2111.

In Figure 2, Stage 1 represents DSP Guidelines as currently adopted. Stage 2 (and Stage 3) represents expected evolution, or a flexible vision for the future that may be adapted based on new information; Stage 2 does not reflect the current DSP Guidelines. In that context, possible future hosting capacity maps would enhance the map called for by current Guidelines.

There was a question about redacted information in the OASIS data and whether this requirement affects the redaction. Staff explained the Guidelines simply assume the OASIS data as-is, and do not revise or alter any agreements or decisions regarding redaction. In discussion it was noted that PGE had subsequently made improvements in 2021 to the Generation Limited Feeder Map, which involved substantial input from TWG participants. Discussion also included a question about why other utilities couldn't start with the 2021 version of the map; Staff noted PGE's 2021 improvements exceeded the Guideline requirements, other utilities were welcome to do so as well, but the Guideline requirements had not changed. There was also a question about the timing of these maps. Staff noted the Guidelines call for utilities to begin this work “upon adoption of the Guidelines,” but do not include a deadline for completion.

2. A base assumption for the Distribution System Planning process is that utilities are able to receive the benefits of grid services that certain Distributed Energy Resources (DERs) are able to provide. However, Oregon has not yet gone through the process of adopting the most current version of the IEEE 1547 interconnection standard that would allow us to work out some of the foundational questions around interconnecting advanced "smart" inverters and advanced battery energy storage systems so that they can provide those grid services. What is the pathway for adopting and implementing the IEEE 1547-2018 in Oregon?

For consideration:

In 2020, NARUC passed a resolution that states adopt and implement the IEEE 1547-2018 standard for interconnection.

- <https://irecusa.org/blog/regulatory-engagement/naruc-formally-recommends-states-adopt-national-interconnection-standards/>
- <https://pubs.naruc.org/pub/4C436369-155D-0A36-314F-8B6C4DE0F7C7>

IREC created a primer on adopting the IEEE 1547-2018 standard:

- <https://irecusa.org/resources/making-the-grid-smarter-primer-on-adopting-the-new-ieee-standard-1547-2018/>

The IEEE has a site where they collect information:

- <https://sagroups.ieee.org/scc21/standards/1547rev/>

**Discussion in meeting:** Staff confirmed awareness of the IEEE 1547-2018 standard, as well as the value smart inverters may bring to the distribution system. Staff noted that it is expected Docket No. UM 2111, interconnection reform, would take up the issue of adopting this new standard. Meeting participants expressed urgency for this action.

### **Proposal for future Technical Work Group meetings and cadence**

Staff proposed that the *Technical Work Group Plan* be revised to reflect the following:

The Technical Work Group continue to meet under the name of *DSP Work Group*. The Purpose Statement be revised to lessen the focus on technical questions.

Meeting length should be scheduled for two hours as a default. Once the agenda is developed, if less time is needed the meeting can be shortened.

Meeting cadence should continue on a monthly basis. During agenda development, if a meeting is not needed it should be cancelled.

Future meeting dates:

- ~~- November 17, 2021 from 1:00 pm – 3:00 pm Pacific;~~ **Note: this meeting is cancelled**
- January 19, 2022 from 1:00 pm – 3:00 pm Pacific
- February 16, 2022 from 1:00 pm – 3:00 pm Pacific
- March 16, 2022 from 1:00 pm – 3:00 pm Pacific
- April 13, 2022 from 1:00 pm – 3:00 pm Pacific
- May 18, 2022 from 1:00 pm – 3:00 pm Pacific
- June 15, 2022 from 1:00 pm – 3:00 pm Pacific

The proposed changes were acceptable. In discussion it was noted that with a de-emphasis in technical focus other participants in Docket No. UM 2005 may now be interested in participating in the Work Group. An updated working draft of the *DSP Work Group Plan* is attached.

## Proposal for areas of additional focus

In response to the discussion during the July meeting about better honing topics for the group, Staff proposed three areas of focus for working subgroups, through June 2022. Staff's proposal utilizes items already in the parking-lot of outstanding issues and questions.

I. A working subgroup to focus on demographic and socioeconomic data, useful energy planning metrics, and quantifying measures and data sources for equity. Consider in this effort identifying preferred sources of public data that include demographics and other details that adequately characterize our communities.

II. A working subgroup to establish common definitions for distribution system planning discussions.

III. A working subgroup to focus on practices for handling public accessibility of data, focusing specifically on the distribution system context (e.g., grid-level data concerns).

Staff explained these topics are not intended to replace the practice of a general solicitation for agenda topics, rather they are intended to bolster and refine the ongoing work of the group. In each instance, the proposal is for the working subgroup to *explore and examine policy options* for this group to consider, as well as stakeholders more broadly to consider (perhaps through a workshop). To be clear, the proposal is not for the working subgroup to *decide* a policy matter.

Staff presented the following questions for consideration and discussion:

1. Is there capacity amongst participants to move forward on these efforts?
2. If so, what is the timeframe for working subgroups?
3. How should working subgroups communicate progress amongst this group?
4. What is the necessary role of Staff to support working subgroups?
5. Are there other practical, or logistical matters to consider?

In discussion it was noted that several other parking-lot topics could be similarly consolidated. For example, number 2 with number 3, and number 6 with number 1:

#2 – Volunteers to work on establishing common definitions for distribution system planning discussions (from 5/7/21, Data Transparency Workshop).

#3 – Volunteers to work on further completing Figure 2 for priority data types (from 5/7/21, Data Transparency Workshop).

#1 – Where and how data will be stored is an important question to discuss early so there is a way to manage, keep safe, and access data as it comes in (from 5/7/21, Data Transparency Workshop).

#6 – Working subgroup to focus on practices for handling public accessibility of data (from 6/30/21, Technical Work Group meeting).

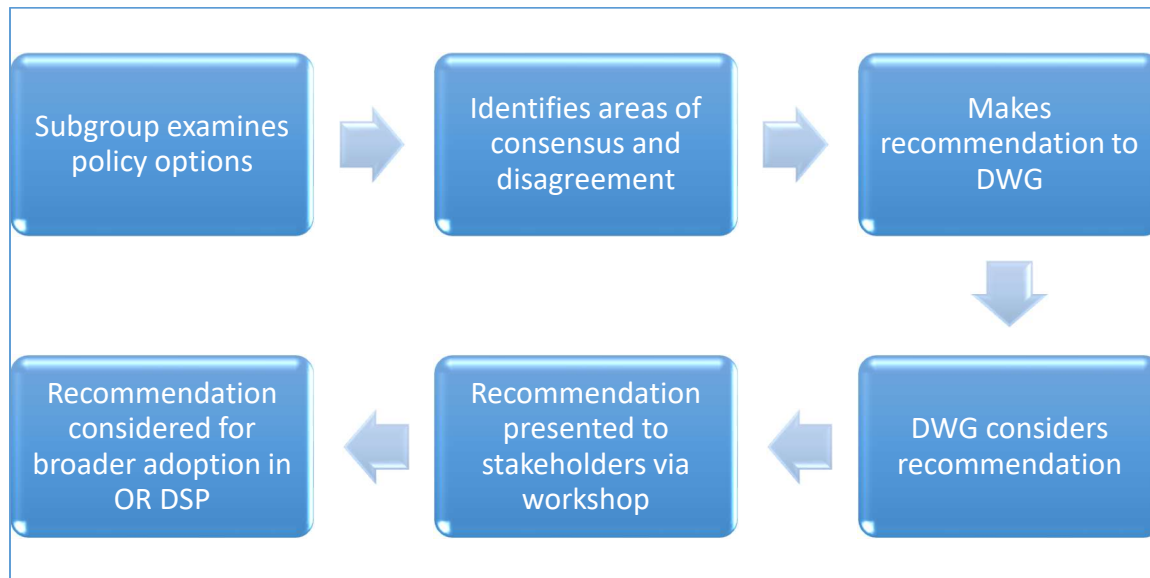
Staff agreed, and noted that the three proposed subgroups were for prioritization purposes, and not to remove or drop other topics from the parking-lot.

The general consensus of the group was support for these topics, and confirmation there is capacity amongst participants to work on these efforts. Additionally, there was a suggestion for developing a venue for “solutions providers,” or firms that offer technology, services, or products applicable to the distribution system.



It was also suggested that a flow-chart would be helpful illustrating how the process might work. Staff has drafted a simple diagram below which, if helpful, can be clarified and expanded as needed.

DSP Work Group - Working Subgroup Flow-chart



#### **Parking-lot for outstanding issues and questions**

- #1 – Where and how data will be stored is an important question to discuss early so there is a way to manage, keep safe, and access data as it comes in (from 5/7/21, Data Transparency Workshop)
  - #2 – Volunteers to work on establishing common definitions for distribution system planning discussions (from 5/7/21, Data Transparency Workshop)
  - #3 – Volunteers to work on further completing Figure 2 for priority data types (from 5/7/21, Data Transparency Workshop)
  - #4 – What are preferred sources of public data that include demographics and other details that adequately characterize our communities? (from 6/30/21, Technical Work Group meeting)
  - #5 – Working subgroup to focus on demographic and socioeconomic data, useful energy planning metrics, and quantifying measures and data sources for equity (from 6/30/21, Technical Work Group meeting)
  - #6 – Working subgroup to focus on practices for handling public accessibility of data (from 6/30/21, Technical Work Group meeting)
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## UM 2005 ~~DSP Technical~~ Work Group Plan Working Draft, November 15, 2021

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### Background

Based on feedback from UM 2005 discussions in 2020, as well as the draft DSP Guidelines (Guidelines) public comment period, Staff understands there is need for, and value in, a ~~Technical DSP~~ Work Group to surface and, when possible, address ~~technical~~ questions that arise in the course of the utilities working on their plans.

Staff proposed the following Plan at the April 21, 2021, inaugural meeting of the ~~Technical~~ Work Group and requested stakeholder feedback. Staff received feedback on emailing materials in addition to posting materials to the docket, and also received a question about recording meetings. In response to this feedback Staff has revised the Plan (with alterations noted via track changes). Staff proposes the revised Plan as a Working Draft - that is a work-in-progress which may be revisited if needed - dated April 28, 2021.

After successful meetings in 2021 Staff asked participants about improving the Work Group moving forward. In response to that discussion Staff proposed that the *Technical Work Group Plan* be revised to reflect the following:

- The Technical Work Group continue to meet under the name of *DSP Work Group*. The Purpose Statement be revised to lessen the focus on technical questions.
- Meeting length should be scheduled for 2 hours as a default.
- Meeting cadence should continue on a monthly basis.

These proposals were adopted at the August 25, 2021, meeting.

### Purpose statement

The purpose of the ~~Technical DSP~~ Work Group is to serve as a forum to identify, articulate, discuss, and when possible, resolve ~~technical~~ questions that arise in the course of the utilities preparing their plans. These questions may be, but are not exclusively, technical in nature.

The primary goal in addressing ~~technical~~ these questions is to try to answer questions, solve problems, and find solutions to barriers that would otherwise inhibit completion of the utility plans.

This is distinct from other docket activities in which raising awareness, developing background, or providing education may be primary goals.

While still in development, the Group may engage in activities such as assisting utilities in vetting ideas needing stakeholder feedback, discussing data formats, clarifying terminology, or acting as a general point of discussion amongst utilities, stakeholders, and Staff.

### Meeting timeline and deliverables

~~Technical DSP~~ Work Group meetings will be open to stakeholder participation.

~~Initially, the~~ Group will meet ~~monthly~~ for ~~32~~ hours on a monthly basis. Cadence and meeting length will be revised as needed.

Staff will solicit questions and discussion topics approximately two weeks prior to each meeting, and from this develop an agenda.

Meeting agendas and materials will then be circulated one week prior to each meeting to allow participants to prepare in advance with the goal of making each meeting as productive as possible. **As the primary means of communication, meeting agendas and materials will be posted to the UM 2005 docket.** For participants' convenience, Staff will develop a list of participants' email addresses, and will also send agendas and materials to these email addresses.

As is practical, Staff may draft answers to questions for review during the meeting. Alternatively, questions may be resolved in the meeting. ~~Alternatively~~Finally, a question may need more thought and consideration than is possible during the meeting in order to be resolved. **In this case, Staff will strive to provide feedback on the unresolved question as expeditiously as possible after a meeting.** Questions may also go unresolved, either in the meeting or after, and should that be the case it may not be a 'bad outcome'.

Staff will take notes during the meetings. The notes will summarize questions being asked, rationale provided surrounding the question and potential resolution, and any resolution. The notes are intended to serve as a reference, but are not intended to serve as a comprehensive transcript. To preserve a collaborative dynamic that promotes sharing of all ideas and concerns, meetings will not be recorded as a regular practice.

**Staff will provide notes as expeditiously as possible after a meeting.** As the primary means of communication, meeting notes, and any feedback on unresolved questions, will be posted to the UM 2005 docket. For participants' convenience, Staff will also send notes and feedback on unresolved questions to participants' email addresses.