Distribution System Planning
Public Workshop #8
May 11, 2022






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Workshop #8 Information

Teams Meeting Information

- Microsoft Teams meeting

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  +1 563-275-5003,,843844742# United States, Davenport

  Phone Conference ID: 843 844 742#

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- Please use the chat function in TEAMS to provide any questions or comments during this presentation. We will do our best to address those as they come up, if we are unable to get to them, we will follow-up directly or at an upcoming workshop.

Today's Agenda

1. Introductions and Review Agenda (15 minutes)
2. DSP Public Participation Survey & Interviews (70 minutes)

   Break (10 minutes)
3. Update on CIG Formation & Engagement Strategy (30 minutes)
4. Pilot/Transitional Study Areas and Grid Needs (45 minutes)
5. Review DSP Part 2 Schedule and Upcoming Topics (10 minutes)

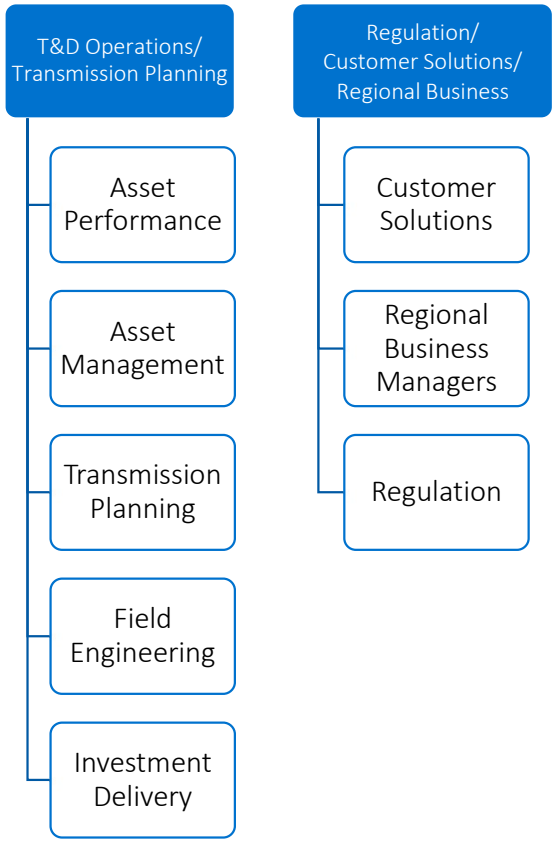
Updates to the PacifiCorp Team

Leads

- Jon Connelly – T &D Asset Management
- TBD – Customer Solutions /Community Engagement

Key Team Members

- Jackie Wetzsteon – Stakeholder Engagement
- Drew Hanson – Corporate Communications
- Daniel Talbot – Engineer
- Daniel Morgan – Engineer
- Teri Ikeda – Regulatory Affairs
- John Rush – DSP Project Manager



2) DSP Public Participation Survey & Results



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Break – 10 Minutes






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3) Update on Community Input Group (CIG) Formation & Engagement Strategy






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Overlap of Regulatory Initiatives for Stakeholder Engagement

Several Community Engagement Regulatory Initiatives that Share Similar Goals

- Engaging potentially overlapping stakeholder groups
  - UM 2005 and Order No. 20-485 - Community Engagement Plan to prepare and implement a Distribution System Plan
  - HB 2021 – Community Benefits and Impacts Advisory Group (CBIAG)
  - UM 2225 – Community engagement strategy to support HB 2021

House Bill 2021

Greenhouse Gas Targets

- Requires retail electricity providers to reduce greenhouse gas emissions associated with electricity sold to Oregon consumers to 80 percent below baseline emissions levels by 2030,
- 90 percent below baseline emissions levels by 2035, and
- 100 percent below baseline emissions levels by 2040.

Clean Energy Plan

- Requires electric companies to develop clean energy plans and electricity service suppliers to report information for meeting clean energy targets.
- Company anticipates first Clean Energy Plan to be filed in 2023 along with its Integrated Resource Plan (IRP)

Equity Elements of House Bill 2021

Section 6. Utility Community Benefits and Impacts Advisory Group

(1) An electric company that files a clean energy plan under section 4 of this 2021 Act shall convene a **Community Benefits and Impacts Advisory Group**.

The members of the electric company's Community Benefits and Impacts Advisory Group will be determined by the electric company with input from stakeholders that **represent the interests of customers or affected entities within the electric company's service territory**.

Members must include representatives of environmental justice communities and low-income ratepayers and may include representatives from other affected entities within the electric company's service territory.

UM 2225 - Streamlining Feedback Process

Develop an Engagement Strategy that:

- Aligns with spirit of Utility Community Benefits and Impact Advisory Group
- Leverages previous learnings
- Coordinates engagement with other requests for customer and community input

Oregon Clean Energy Plan Engagement Strategy

- Filed **initial** customer engagement proposal with Commission on April 21, 2022
- Provides mechanisms and processes for meaningful stakeholder engagement on utility initiatives including the Distribution System Plan and the Clean Energy Plan
- Proposes a hybrid stakeholder engagement model
    - Relies upon existing engagement processes within IRP
    - Develops new processes – Community Input Group
- Updated Engagement Strategy to be submitted; deadline is May 18th but Oregon staff considering extension
- The engagement strategy will continue to be refined over time

Oregon Clean Energy Plan Engagement Strategy (continued)

- PacifiCorp proposes bifurcating community and stakeholder outreach for the CEP between the existing IRP process and newly formed CIG.
- The Company anticipates the Clean Energy Plan will be included within the IRP and there will be opportunities for engagement throughout the IRP development process.
- The CIG will focus on equity and inclusion matters although overlap will exist between the two advisory groups.
- The IRP and CIG engagement processes will include education on utility processes and operations to support thoughtful feedback on DSP efforts and the CEP.

Learnings from the DSP Survey

Communication is Key:

- Educate customers about moving toward a cleaner and more equitable energy grid in a clear and concise manner
- Focus on key desired benefits
- Address primary concerns: transition cost and potential impact on electric bills
- Utilize a mix of communication strategies

Learnings from Washington Equity Advisory Group

Disadvantaged Communities
- Definition of equity
- Validation of disadvantaged communities
- Identification of vulnerable populations
- Challenges and barriers to program entry
- Need for trusted messengers

Customer Benefit Indicator (CBIs)
- CBI outcomes related to challenges
- Prioritization of benefits flowing to named communities

Utility Actions
- Community outreach and engagement actions
- New program considerations and design
  - Electric vehicle (EV) grant program

Metrics
- Development of leading metrics
- Sharper focus on equity

Integrated Resource Plan (IRP) Process Engagement

IRP has a Robust and Established Engagement Process

- The company will host a series of meetings to inform the public on the development of the IRP and provide opportunities for stakeholder input
- The IRP meeting series will include:
  - State policy updates
  - Information about Oregon's Clean Energy Plan
  - Details on where to go to obtain additional information
- The Company plans to leverage IRP communication methods to further engage the public and stakeholders regarding its Clean Energy Plan development

Community Input Group

Seeking CIG support to build an inclusive and accessible process of consultation and collaboration by:

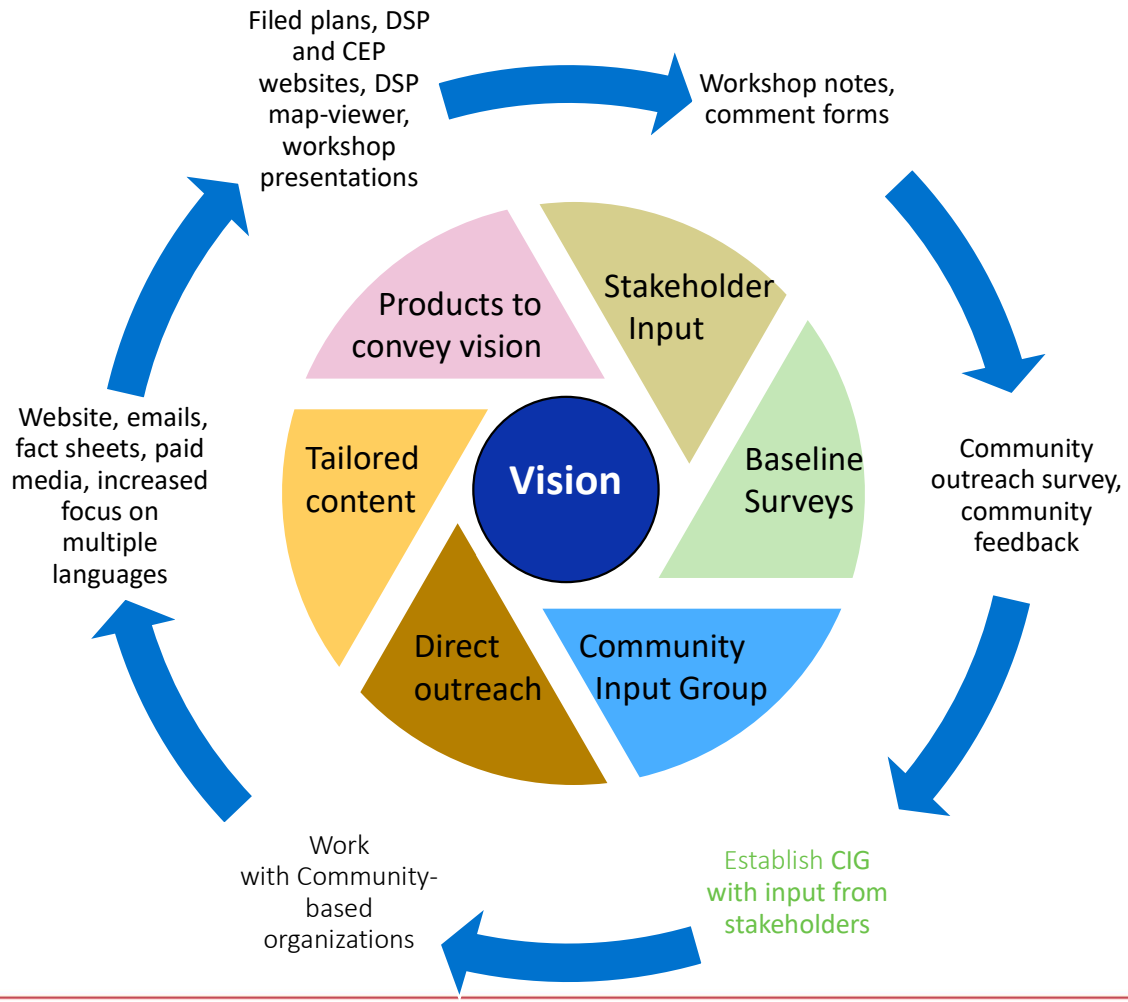
- Providing the company with a better understanding of community needs and perspectives
- Identifying barriers to participation and input on how to address these barriers
- Increasing participation of marginalized communities traditionally excluded from utility planning processes
- Acting as a conduit to exchange information and ideas between the company and communities
- Assisting with outreach into communities
- Reviewing outreach and communication materials to ensure the content is mindful in tone and content

Community Input Group (cont.)

Initial Thoughts on CIG Membership

- One state-wide group representing lived experiences and perspectives of communities and customers within PacifiCorp's Oregon service territory
- Focus is on equity and access to the process
- Membership size of 10-15
- One year commitment from members
- Anticipate monthly meetings
- Meetings to include space for public participation
- Member compensation program to be piloted
- May include technical subcommittees
- Initial meetings will focus on:
  - Understanding DSP
  - How DSP impacts the community
  - Developing a framework for program/project evaluation

Community Input Group Process Engagement



Community Input Group Next Steps

- Conduct potential member recruitment and confirm initial membership
- Establish meeting schedule
- Refine near-term meeting topics:
  - PacifiCorp Overview
  - Utility 101 (Basic utility service – generation to the home, intro of basic electricity concepts, utility regulation and obligations)
  - Introduction to Distribution System Planning
  - Distribution System Planning Specific Topics:
    a. Grid Needs
    b. Solution Identification
    c. Non-Wires Solutions (NWS) – what are they and how are they evaluated?

Questions or Comments on Community Engagement Strategy?

- Docket UM 2225 on the Oregon PUC website
- https://edocs.puc.state.or.us/efdocs/HAH/um2225hah16129.pdf

Please send questions or comments directly to PacifiCorp via email at OregonCEP@PacifiCorp.com

4) Pilot/Transitional Study Areas and Grid Needs Approach



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Pacific Power Service Territory

Overview of Pacific Power – Oregon

- 502 distribution circuits
- 191 distribution substations

Office	NORTH REGION			CENTRAL REGION			SOUTH REGION	
	Portland	Walla Walla	Yakima	Bend	Albany	Roseburg	Klamath Falls	Medford
Responsible Operating Areas	Clatsop (Astoria) Portland Hood River	Walla Walla Hermiston Pendleton Enterprise	Sunnyside Yakima	Madras Hood River Bend/Redmond Prineville	Albany Corvallis Dallas/Independence Cottage Grove Stayton Lebanon Lincoln City Junction City	Coos Bay Roseburg	Alturas Lakeview Mt Shasta Klamath Falls Yreka	Crescent City Medford Grants Pass
Distribution Profile	95 Circuits 1,200 Line Miles 107,000 Customers	42 Circuits 2,500 Line Miles 54,000 Customers	106 Circuits 3,300 Line Miles 108,000 Customers	65 Circuits 2,800 Line Miles 77,000 customers	86 Circuits 3,700 Line Miles 137,000 Customers	66 Circuits 2,300 Line Miles 70,000 Customers	110 Circuits 5,000 Line Miles 75,000 Customers	138 Circuits 5,700 Line Miles 156,000 Customers
District Specific Attributes	Portland UG Networks DA Pilot Project FHCA		FHCA	High Growth Rate/New Connections FHCA	DA Pilot Project	FHCA	Multiple Code Requirements FHCA & HFTD Footprint Energy Storage Pilot	Large FHCA Footprint DA Pliot Project

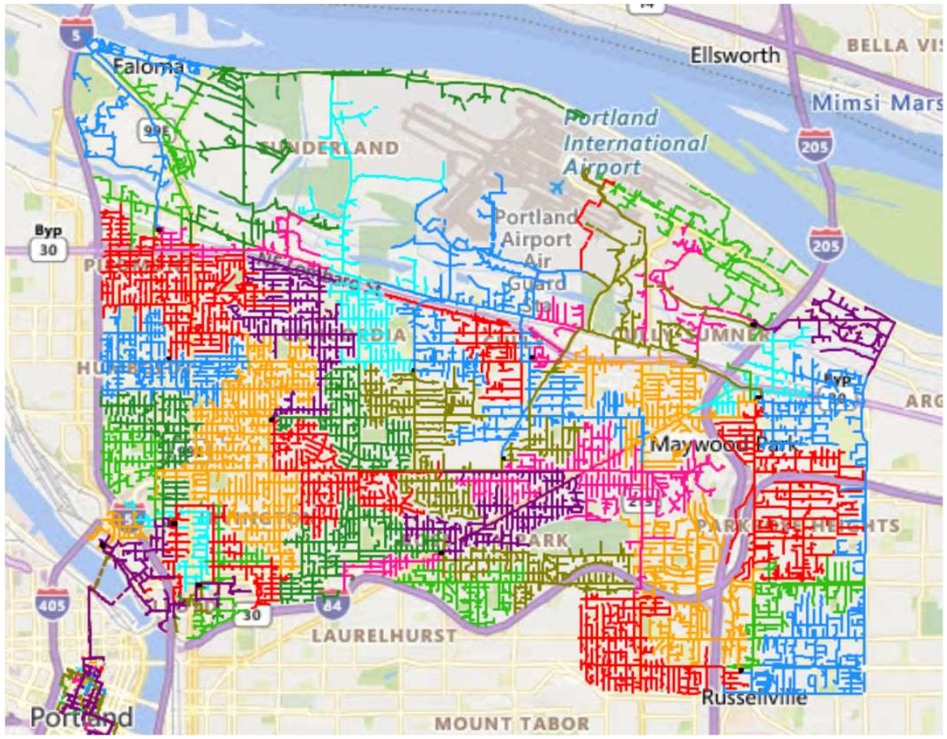
As-Is DSP/5 Yr Planning Cycles

Distribution Planning Studies

- All distribution system planning studies are scheduled to be completed on a 5-year cycle
- Study schedules are evaluated each year and studies may be shifted to occur sooner or later depending on a number of factors (high load growth activity, large load additions, etc.)
- Currently 99 planning studies on 5-year cycle in Pacific Power service territory

Ad-hoc Studies (Generation Interconnect or System Impact Study)

- Typically driven by load, generation interconnection service or transmission service requests
- Study is generally focused on a limited area, and the immediate effects of the request on reliability and load service



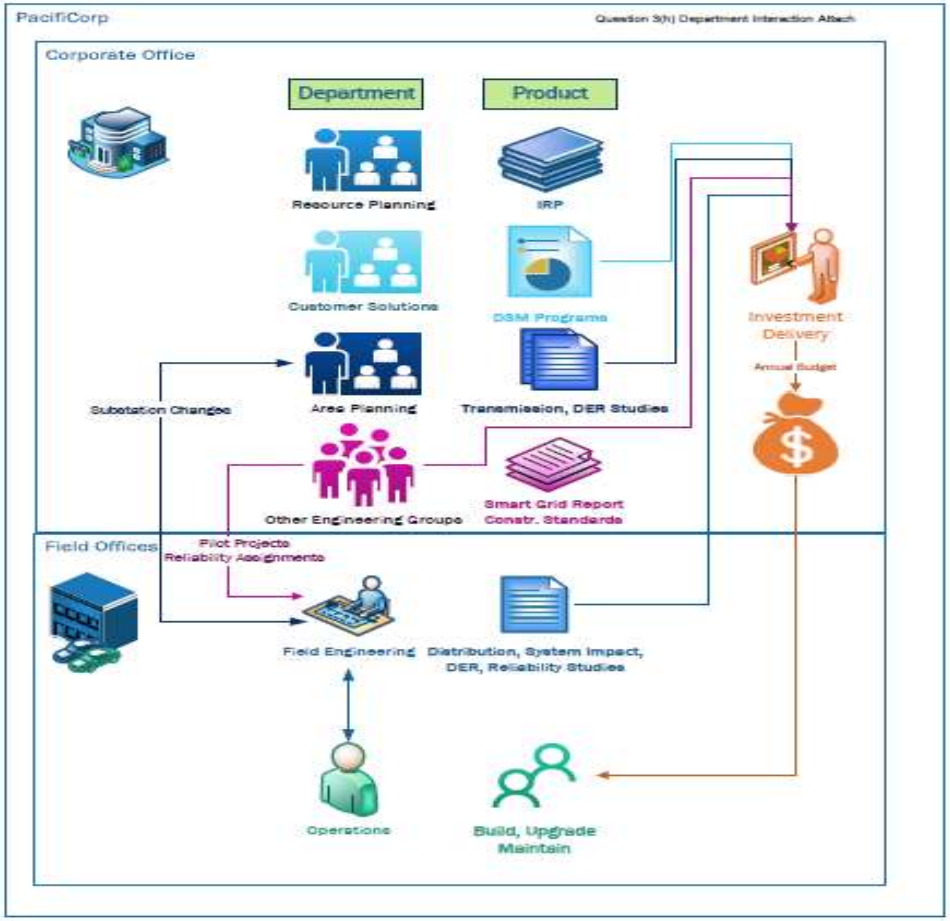
As-Is DSP/5 Yr Planning Budget Process

Distribution Planning Studies

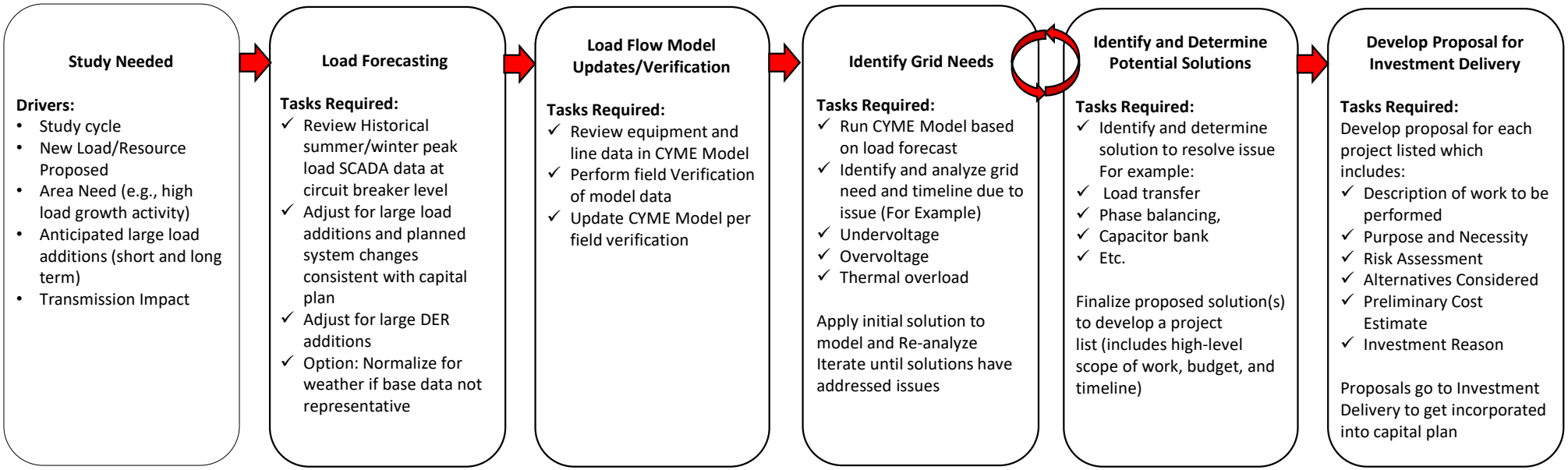
- Develop list of distribution projects to resolve potential system deficiencies/conditions
- Generally provided to investment delivery department prior to the end of Q2 to be incorporated in capital plan annual update
- After Q2, review existing plan to verify scope and timing aligns with results of current studies

Ad-hoc Studies (Generation Interconnect or System Impact Study)

- Develops a distribution project to resolve identified system deficiencies/condition to serve new load/generation addition
- Timeline established by customer need
- Incorporated into capital plan during annual update

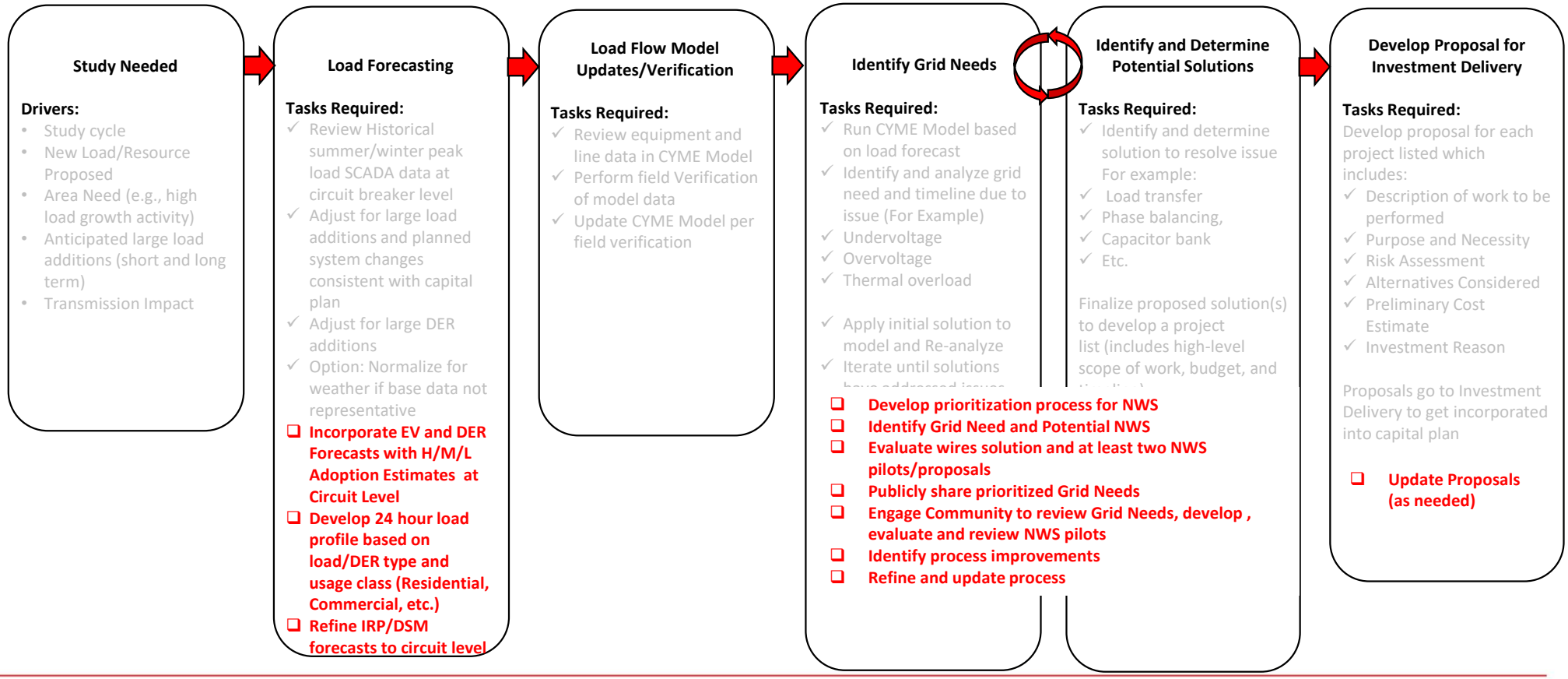


As-Is DSP/Area Planning Process



Transitional/Pilot Planning Process

New Activities For Transitional/Pilot Planning Areas



Transitional Study Areas

From DSP Part 1, PacifiCorp targeted two regional areas:

- Klamath Falls
- Pendleton

Areas selected for transitional planning:

- ✓ DG Capacity and Readiness (SCADA availability, DG Protection Measures, Daytime Minimum Load)
- ✓ Study cycle timing
- ✓ Historical DER project activity
- ✓ Area demographics and characteristics (Suburban/Rural)

PacifiCorp is seeking input on these areas:

- Requesting feedback via workshop, webpage, community engagement
- Asking DSP workshop participants if they have any suggestions, feedback, etc.

2022 Distribution System Planning Pilot Circuits

Revised Load Bubble	BPA NITS		Central Oregon	West Main				
Revised Sub Load Bubble	Pendleton	Santiam	Bend	Clatsop Astoria		Southern Oregon/California		
DSP Planning Area	Pendleton	Stayton	Bend	Astoria	Klamath Urban	Merlin	Roseburg Urban	Upper Rogue
Circuits	5W202 5W203 5W401 5W402 5W403 7W451 7W452 7W453 7W454 5W856	4M120 4M70	5D10 5D12 5D155 5D196 5D238 5D241 5D243 5D411 5D413 5D418	5A204 5A211	5L112 5L113 5L45 5L46 5L48 5L49 5L54	5R232 5R234 5R248 5R251	4U10 4U22 4U30 4U31 4U38 4U39 4U5 4U81 5U15 5U17 5U19	4R13 4R17 4R9

Preliminary Grid Needs – Transitional Planning Areas

Circuit/Area Characteristics:

- Suburban/rural feeders (low load density with high circuit miles)
- Small conductor on the mainline which allows for less load capacity and higher voltage drop (Does not necessarily = less DG readiness)
- Historically higher DER adoption than other areas in Pacific Power service territory (I.E. Portland, Astoria, etc.)
- Ranked higher in DG capacity and readiness than other areas

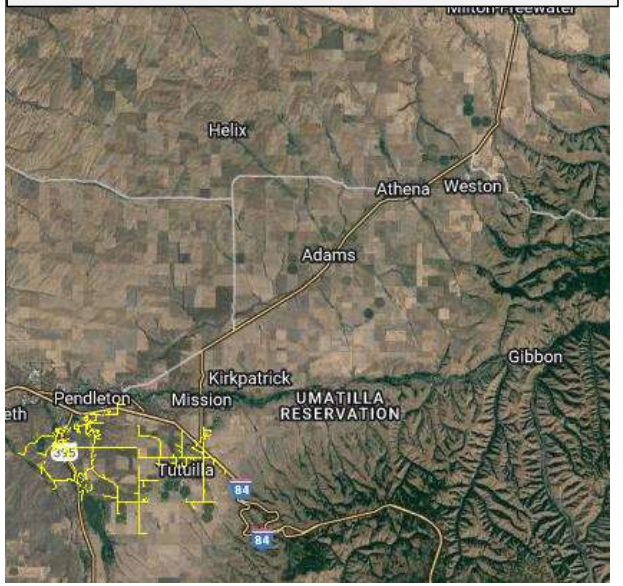
Preliminary findings/Grid Needs

Klamath Falls – Crystal Springs – 5L45

- Projected peak summer load drives overload on conductor
- Phase imbalance
- Low voltages on circuit

Pendleton – Hotel District – 5W856

- Limited grid needs due to recent investment upgrades
- Low voltages in outlying areas



Request Input and Feedback for Pilot NWS Proposals

- Location
  - Klamath Falls and Pendleton locations mentioned in workshop (Strong preference, pre-work is underway)
  - Other Pacific Power Oregon territories (evaluated on case by case basis)
- Request for Feedback by
  - Deadline – May 25
  - Need time to prepare for workshops and August filing, but always open to hearing from people
- Submit Feedback to us
  - Form available at website: DSP Pilot Project Suggestion Form
  - Send an email to DSP@pacificorp.com


Questions?

5) Part 2 Schedule and Topics



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Part 2 - Schedule and Topics

- Schedule
  - OPUC DSP Workgroup Meetings – May 19, Jun 16
  - Pacific Power DSP Workshops – June 24, July 21
  - Distribution System Plan (Part 2) to be filed on August 15, 2022

- Pacific Power Public June and July Workshops – Potential Topics
  - Review Load Forecast, Adoption for DER and EV
  - Present Pacific Power Grid Needs
  - Non-wires Solutions (NWS) – Identification and Assessments
  - Updates on Community Input Group/Engagement Strategy
  - Review Solutions and Short-Term Plan

Additional Information

- DSP Email / Distribution List Contact Information
  - DSP@pacificorp.com
- DSP Presentations
  - Pacific Power Oregon DSP Website
- Additional Resources
  - Pacific Power's DSP Part 1 Report
  - DSP Pilot Project Suggestion Form
  - Pacific Power's 2019 Oregon Smart Grid Report
  - Pacific Power's Oregon Transportation Electrification Plan
  - PacifiCorp's Integrated Resource Plan

Thank You!






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