Chapter 2 Distribution System Vision

Nihit Shah

Senior Strategy & Planning Analyst



- 5-



Chapter Regulatory Response

DSP Section	Summary Description	Action
2.2	PGE's vision for the distribution system over the next 5-10 years	Developing a strategy that is aligned with state policy, PGE corporate strategy, and stakeholder feedback
2.3	PGE's goals for the distribution system vision	Representing the vision in the form of tangible goals
2.4	Strategic initiatives	Creating a line of sight from vision to execution
2.5	Policy and planning intersections	Intersection of the DSP with IRP, T&D planning, and utility budget
2.6	Monitoring and adapting PGE's vision	Key metrics to evaluate PGE's vision over time

PGE envisions a 21st century community centered distribution system that Accelerates decarbonization through DER programs, nonwires solutions, virtual power plants and other mechanisms to strategically provide community benefits, especially to environmental justice communities, while improving metrics around safety, reliability, resiliency, and security.



Distribution System Vision Overview



Goals

Our vision aims to achieve the three goals:

- Advance environmental justice
- Accelerate DER adoption
- Maximize grid benefits

Execution Strategy

To execute on our vision and realize our goals for the distribution system, PGE has developed and is working on five strategic initiatives:

- Empowered Communities
- Modernized Grid
- Resilience
- Plug and Play
- Evolved Regulatory Framework

Vision to Execution – Line of Sight

Corporate Strategy	Decarbonize		Electrify	Per	form
DSP Vision	21st century community-centered distribution system				
DSP Goals	Advance environmental justice goals		Accelerate DER adoption	Maximize grid benefits	
DSP Strategic Initiatives	Empowered communities Enabling equita- ble participation in the clean energy transition through human-centered planning and community engagement	Modernized grid Optimizing a grid platform that is safe, secure and reliable through current and future grid capabilities	Resilience Strengthening the grid's ability to anticipate, adapt to, withstand and quickly recover from disruptive events	Plug and play Improving access to DER invest- ments needed to accelerate customers' clean energy transitions through such activities as hosting capacity analysis	Evolved regulatory framework Evolving the regulatory framework needed to support utility investment in customer- and community-cen- tered solutions

Advance Environmental Justice

Provide direct benefits to communities

Applying equity lens to maximize benefits to environmental justice communities

PGE envisions new opportunities to strategically deploy assets and tariffs to yield more equitable outcomes, especially for those who are most vulnerable.

Solutions such as community microgrids, non-wires solutions and continued flexible load development can deliver these values.

These new investments are a key feature of the 21st century community-centered distribution system and can be strategically used to **reduce energy burden** and **improve local economic impacts**.

Accelerate DER Adoption

- Building the distribution system to meet evolving customer needs and address barriers to increase adoption with aspirational targets for 2030:
- Flexible loads upwards of 250 to 500 MW (~2x of the current forecast)
- Electrify 1,100,000 vehicles (~3 to 4x of the current forecast)





Maximize Grid Benefits

Building on traditional utility values with new values:



Strategic Initiatives for Execution

Empowered Communities	Grid Modernization	Resilience	Plug and Play	Evolved Regulatory Framework
Enabling equitable participation in the clean energy transition	Enabling an optimized grid platform for a safe, secure, reliable system	Anticipating, adapting to, withstanding, and quickly recovering from disruptive events	Improving access to grid edge investments to accelerate customers' clean energy transition	Evolving the regulatory framework to support utility investment in customer and community centered solutions
FROULD			12 I	

Interaction with Planning and Budgets

Forecasting adoption of DERs such as EVs and solar PV

DSP-IRP

Economic potential of current and expected future DER products and programs

Integration of non-costeffective DER supply curves

DSP-T&D planning

Feeder level load and DER adoption to improve distribution planning process

Non-wires solutions will expand planning capabilities

DER impacts can be determined individually and with weather normalization

DSP-Utility budget

Driving investments to modernize the grid

Locational improvements driven by DER adoption

Non-wires solutions drive different budget and equity implications

Chapter Take-Aways

Corporate Strategy	Decarbonize		Electrify	Perl	orm
DSP Vision	21st century community-centered distribution system				
DSP Goals	Advance environmental justice goals		Accelerate DER adoption	Maximize grid benefits	
DSP Strategic Initiatives	Empowered communities Enabling equita- ble participation in the clean energy transition through human-centered planning and community engagement	Modernized grid Optimizing a grid platform that is safe, secure and reliable through current and future grid capabilities	Resilience Strengthening the grid's ability to anticipate, adapt to, withstand and quickly recover from disruptive events	Plug and play Improving access to DER invest- ments needed to accelerate customers' clean energy transitions through such activities as hosting capacity analysis	Evolved regulatory framework Evolving the regulatory framework needed to support utility investment in customer- and community-cen- tered solutions

36

Questions?

Please email us at dsp@pgn.com

