## Distribution System Planning Principles

Questionnaire Section D















# Principles For Commission Review of Distribution Planning

## Establishing a set of principles is a critical first step in this investigation

- Safety, security, reliability, and resilience of the electric grid
- Electric service at fair and reasonable costs
- Optimized utilization of grid and resources to minimize total system costs
- Efficient, cost-effective, accessible grid platforms
- Greater customer engagement
- Compliance with federal regulatory requirements
  - Mandatory NERC Standards
  - Fair and objective interconnection studies and process
- Comprehensive distribution system planning

## Direction from Commission Should Not Be Proscriptive/ Recognition of Differences

#### Each electric utility in the state is differently situated

- Huge significance for distribution system planning
- Different levels of density, geographic attributes, interconnection requests, load / delivery profiles, historical or real-time information and customer bases
- Distinctions exist even within each utility's service territory

#### Principles should be somewhat broad

- What is cost-effective and increases reliability in one area or provides new customer choices, may increase system costs unnecessarily and undermine reliability in another
- Appropriate distribution system investments will vary by service location and by utility

## **Customer Value**

## **Primary Core Principles**

Reliability

No compromise to the reliable operation of the electric system

Affordability

Continued access to affordable electric service

System Efficiency

Encourage technologies that create more efficient system and reject those that unnecessarily encumber the system

## **Customer Value**

## **Additional Objectives**

#### Customer Enablement

DSP should assist customers' energy choices, but cannot be unlimited or unconstrained and must maximize the value of grid investments for all customers with no negative reliability impact to other customers

## New Technology

Allow a utility to better integrate distributed energy resources and clean technologies

### Coordination

System plan should be coordinated with integrated resource plans (IRP), local transmission system plans and regional transmission plans, while also respecting load, interconnection, and transmission service obligations

#### Fairness

Historical principle of equitably sharing system costs and avoiding cross-subsidization

## **Evaluation of Plans**

## **Criteria**

Metrics should be simple and the evaluation criteria straightforward, evolving as Commission increases its understanding of the process and goals of distribution system planning

## Integration

Depends on the ultimate goals and content of the utility plans, as defined by the Commission PacifiCorp does not anticipate significant changes from its current approach

- Logical connection to the IRP, but distinct differences between the planning processes (integrated but not interlaced)
- Critical to recognize that impact on the utility's system, particularly for PacifiCorp's noncontiguous system
- The distribution system is inherently intertwined with the transmission system, so consistency in the rules and policies is key
- Distinction between State/FERC jurisdiction is fluid as system expands and usage changes

## Conclusion

Distribution system planning is a complex and evolving effort that must be undertaken in a deliberately phased and thoughtful manner

 Each step in the process should create a solid foundation for the next

Ultimately, the utility bears the burden of maintaining reliability and serving load