

# UM 2005: Distribution System Planning

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RENEWABLE  
NORTHWEST

# ROADMAP

1. End Goals
  - a. Customer & System Benefits
  - b. Reduce Carbon Emissions
2. Barriers
  - a. Legacy Process
  - b. Embedded Incentives
3. Solutions
  - a. Inclusive & Innovative Process
  - b. Performance-Based Regulation



END GOALS:

CUSTOMER &  
SYSTEM  
BENEFITS

- Customer Benefits:
  - Bill savings
  - Choice
  - Equity
  - Resiliency
- System Benefits:
  - Integrate renewables
  - Facilitate system change
  - Avoid system needs
  - Resiliency

## END GOALS:

# REDUCE CARBON EMISSIONS

- “Renewable Northwest will evaluate utilities’ plans against the policy objectives of **integrating variable generation from renewable sources ...** and achieving energy-sector decarbonization.”
- “... changes at the distribution-system level provide unique opportunities to **support decarbonization of vehicles and buildings** as well by facilitating beneficial electrification.”

# BARRIERS:

# LEGACY PROCESS

## Context

- ▶ Distribution planning has traditionally been focused on maintaining:
  - Safety
  - Reliability
  - At reasonable cost
- ▶ At the core distribution planning supports investment decisions
- ▶ As the grid and resource mix are changing, distribution systems are changing and distribution planning is changing
  - In many places, a lot of new gen is connected to the distribution system
  - Distribution system has least amount of utility visibility/control
- ▶ In some states, more detailed distribution plans are being required :
  - Hosting capacity
  - Locational benefits and non-wires alternatives
- ▶ New skill sets may be required as well as coordination across entities within the utility



BARRIERS:

LEGACY  
PROCESS

- Internal-facing
- Opaque
- Difficult to meaningfully incorporate DERs
- Equity concerns may be overlooked



# BARRIERS: EMBEDDED INCENTIVES

- “The long-standing economic incentives for utilities to **invest significant capital** in order to earn a return for investors and to realize earnings through **sustained load growth** have produced the highly reliable, low cost, centralized utility system that we enjoy today.”
- “Exploring discrete areas of utility service where the PUC can allow utilities to **earn a return on outcomes** rather than on capital expenditures will ... provide **incentives for innovation** while leading to the best results for utility customers.”

## SOLUTIONS:

## INCLUSIVE & INNOVATIVE PROCESS

- External-facing
- Transparent
- Use new tools to harness DERs & shape load to variable generation
- Capture equity concerns re: benefits & costs



# SOLUTIONS:

## INCLUSIVE & INNOVATIVE PROCESS

Agencies must involve the public throughout the entire process to ensure the affected community has ability to meaningfully participate.

### Meaningful Participation Requirements

The **AFFECTED COMMUNITY must have**

1. access to full information in plain language
2. the ability to influence the outcome

The **DECISION-MAKER must**

1. consider public's concerns before deciding
2. seek out facilitate public involvement

## SOLUTIONS:

# PERFORMANCE- BASED REGULATION

- ▶ **Utility Incentive Alignment**—The PUC will launch a *performance-based regulation* process to align utility incentives with customer objectives. Proposals will be invited under the PUC’s existing “alternative form of regulation” statute.

# CONTACT

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