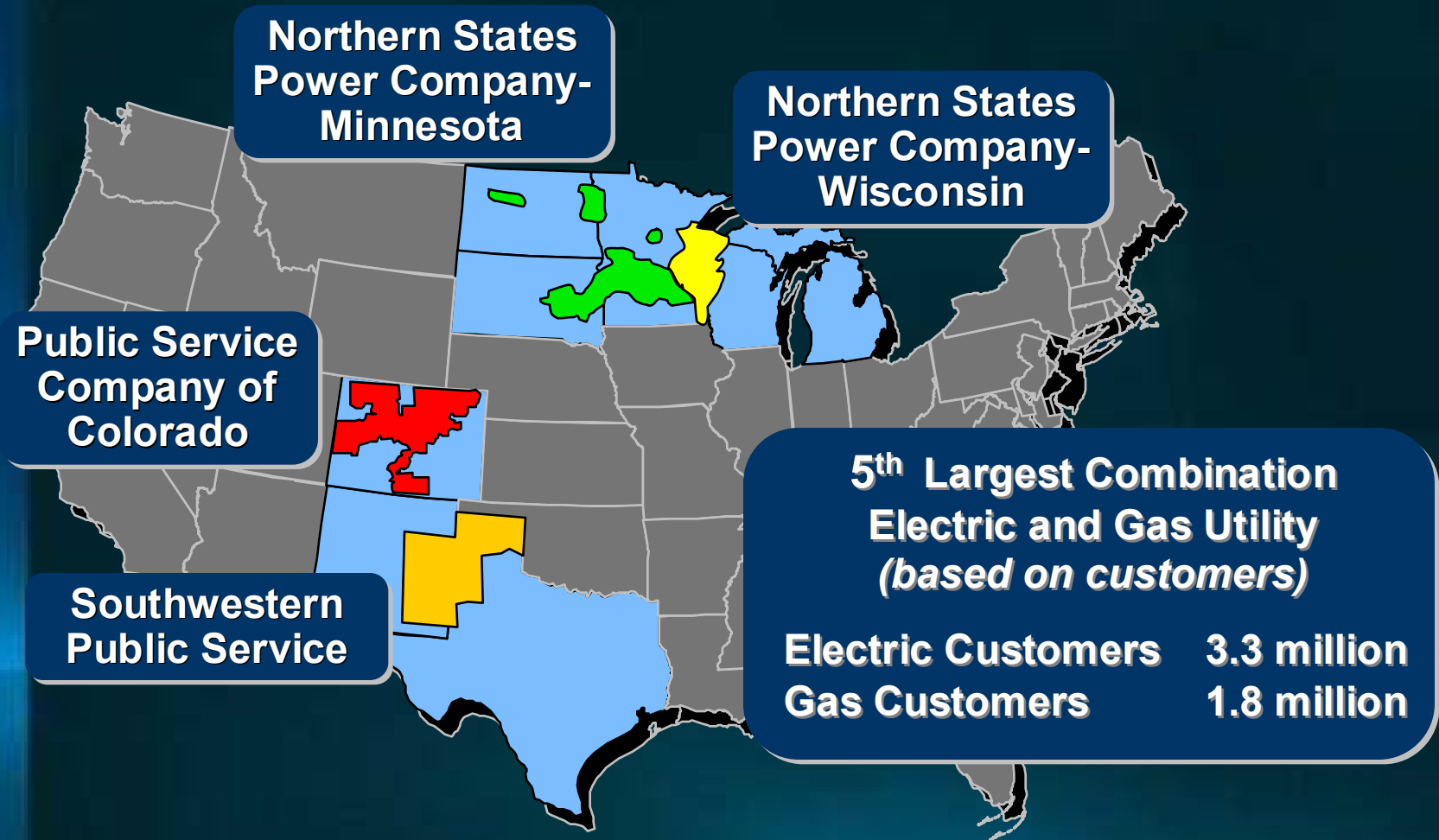


# **BENEFICIARIES OF TRANSMISSION EXPANSION**

*Who, Where, When and How Much?*

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# The New Transmission Directive

- Build it fast, cheap and out of my visual sight after having an exhaustive, transparent planning process...
- Make sure power is at my outlets 24x7 and of high-grade quality...
- Prevent every possible terrorist attack scenario and comply with the 1000+ requirements underlying the 83 mandatory reliability standards...
- Access those vast remote renewables, and while you're at it, use advanced technologies...
- Get a higher ROE with incentives, but don't disrupt the base rates...
- But more importantly, don't designate me as a beneficiary...

# The New Transmission Directive

**Can transmission**

**be expanded**

**under this rubric?**

**YOU BET IT CAN!**

**PLEASE READ THE FINE PRINT:**

*But everyone's got to give to get*

- Build it fast, cheap and out of my pocket while having an exhaustive, transparent planning process...

- Make sure power is at my outlet 24/7 at high grade quality...

- Prevent every possible terrorist attack, and comply with the 1000+ requirements underlying the 82 manufacturing standards...

- Access those vast remote areas while you're at it, use advanced

- Get a higher ROE with incentives, but don't distort the market...

- But more importantly, don't designate me as a beneficiary...

# Framing the Rubric...

*Not since the 1970s, has the US collectively pursued an energy infrastructure build-out*

**The consequences:**

- Expensive congestion
- Declining transmission capacity per MW-mile

*Regional markets pool resources and economize expansion projects*

**The drivers:**

- Reliability
- Economics
- Resource expansion (including renewables)
- Security

*Investors and utilities want regulatory certainty expansion projects*

**The hurdles:**

- Cost recovery
- Interstate siting
- Overbuilds for future load and supply growth

# What Hurdles Have Been Cleared?

## ■ EPOct 2005

- National Interest Electricity Corridors
- Backstop siting authority
- Transmission incentives
- Mandatory reliability standards including cyber security

## ■ FERC

- EPOct Provisions
- Order 890 OATT reform
- Order 2003 & 2006
- CA ISO financing mechanism proposal
- Fuel neutral with a thumb on the scale for renewables

# What Remains...

- **Cost recovery/  
regional pricing**
- **State coordination  
on regional  
transmission  
siting**

**These are not insurmountable,  
but they are peppered with political  
and regulatory landmines**

# Cost Recovery/Regional Pricing

## The Issues

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### **Classification**

Determining reliability, economic, or generator outlet

### **Beneficiaries**

Assessing expansion benefits to retail versus wholesale and subregion versus subregion

### **Payments**

Divorcing investment from native load repayment obligation



# Cost Recovery -- Classification

*Perception:*  
Each project is  
**EITHER**  
reliability,  
economic  
**OR**  
generator  
outlet

- **Reality** – all projects cross lines into 2 or all 3 classifications
- **Reality** – projects can be classified for one purpose locally, a different purpose subregionally, and yet another across the region
- **Reality** – project can benefit a single entity or subregion while causing constraints two states away
- **Reality** – classifications can change over time: “reliability today, economic tomorrow”

# Cost Recovery -- Classifications

## Pros / Benefits

- Models promote construction as entities race to build in order to spread their costs
- Transmission projects generally benefit a region or portions of a region

## Cons / Challenges

- An entity with limited need for new transmission may pay more for others' projects
- Entities still subject to uncertainty in cost recovery
- "Beneficiaries" may dispute RTO determinations
- Benefits or beneficiaries change over time while classification is determined at a single point in time

# Cost Recovery – Beneficiaries

***Perception:***  
Models are scientific and impartial enough to appropriately allocate cost to beneficiaries

- **Reality** – Some positive movement with beneficiary models
  - Have promoted transmission as costs are split with a portion spread with a postage-stamp rate
  - Have had both state and FERC regulatory participation which is leading towards the necessary regulatory certainty

# Cost Recovery – Beneficiaries, *cont.*

***Perception:***  
Models are scientific and impartial enough to appropriately allocate cost to beneficiaries

- **Reality** – Some unintended consequences with spreading of costs
  - Entities that have aggressively constructed in years past will see more costs put to their customers
  - Entities with small transmission asset base and large load requirements will also see more costs put to their customers
  - If an entity is facing a major build-out, its native load will not have to bear the full burden

# Cost Allocation Case Studies

|                             | SPP                                                                                                                                            | Midwest ISO                                                                                                                                   |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reliability projects</b> | <ul style="list-style-type: none"> <li>■ 33% postage stamp</li> <li>■ 67% subregional allocation</li> </ul>                                    | <ul style="list-style-type: none"> <li>■ 20% postage stamp</li> <li>■ 80% subregional allocation</li> </ul>                                   |
| <b>Economic projects</b>    | <ul style="list-style-type: none"> <li>■ 100% direct assigned</li> <li>■ Currently under study</li> </ul>                                      | <ul style="list-style-type: none"> <li>■ 20% postage stamp</li> <li>■ 80% subregional allocation</li> </ul>                                   |
| <b>Generator Outlet</b>     | <ul style="list-style-type: none"> <li>■ 100% generator</li> <li>■ 0% reliability spread</li> </ul>                                            | <ul style="list-style-type: none"> <li>■ 50% generator*</li> <li>■ 50% reliability spread</li> </ul>                                          |
| <b>Model</b>                | <ul style="list-style-type: none"> <li>■ Megawatt Mile</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>■ Line Outage Distribution Factor Studies (LODF)</li> </ul>                                            |
| <b>Weaknesses</b>           | <ul style="list-style-type: none"> <li>■ External SPP inputs</li> <li>■ Time horizon</li> <li>■ Projects fall into multiple buckets</li> </ul> | <ul style="list-style-type: none"> <li>■ Use of Summer Peak</li> <li>■ Time horizon</li> <li>■ Projects fall into multiple buckets</li> </ul> |
| <b>Current debate</b>       | <ul style="list-style-type: none"> <li>■ Highway/byway</li> <li>■ Expand postage stamp</li> </ul>                                              | <ul style="list-style-type: none"> <li>■ Continue License Plate rates for existing facilities</li> </ul>                                      |

# Cost Allocation – Regional Pricing

## *Perception:*

⑩ FERC approval of RTO allocation methods ends the cost allocation debate

- **Reality** – States may not allow retail ratepayers to pay for 3<sup>rd</sup> party upgrades through...
  - ...postage stamp rates – including the non-generator funded allocation
  - ...subregional allocations – including the non-generator funded allocation
- **Reality** – Generators cannot afford the generator outlet proposal
- **Reality** – States may not allow retail rate payers to pay for transmission that moves power from one state to another



# How Do We Advance The Ball?

## Resolve the cost-recovery debate

### ■ Short-term:

- Land on acceptable classification process – K.I.S.S.
- Resolve the generator-funding issue related to distributed, renewable resources – *accept the inevitable over-build*
- Lean toward higher allocation to postage stamp, reduced allocation to beneficiary
- Eliminate the seams between states and FERC

### ■ Long-term:

- State support for rolled in pricing w/ postage stamp approach for new regional, high-voltage investments
- Clear methodology on beneficiary allocation for local load-serving projects





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