



# Report on Transmission Cost Allocation for RTOs and Others



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# Highlights of Recent Report (1)(2)

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- **Projected Transmission Investment.**
- **Issues with Transmission Cost Allocation Methods.**
- **Examples of Innovative Cost Allocation Methods.**
- **Conclusions.**

## Report Title and Where to Find It —

(1) Fink, S.; Porter, K.; Mudd, C.; Rogers, J. (2011). Survey of Transmission Cost Allocation Methodologies for Regional Transmission Organizations. 67 pp.; NREL Report No. SR-5500-49880.

(2) [www.nrel.gov/wind/.../pdfs/2011/fink transmission cost allocation.pdf](http://www.nrel.gov/wind/.../pdfs/2011/fink_transmission_cost_allocation.pdf).

# Transmission Addition Trends

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## NERC Expects:

- About \$10 billion per year going forward.
- An increase of 31,400 circuit miles or about 8% by 2018.

The Brattle Group found more than \$120 billion worth of planned and conceptual transmission projects.

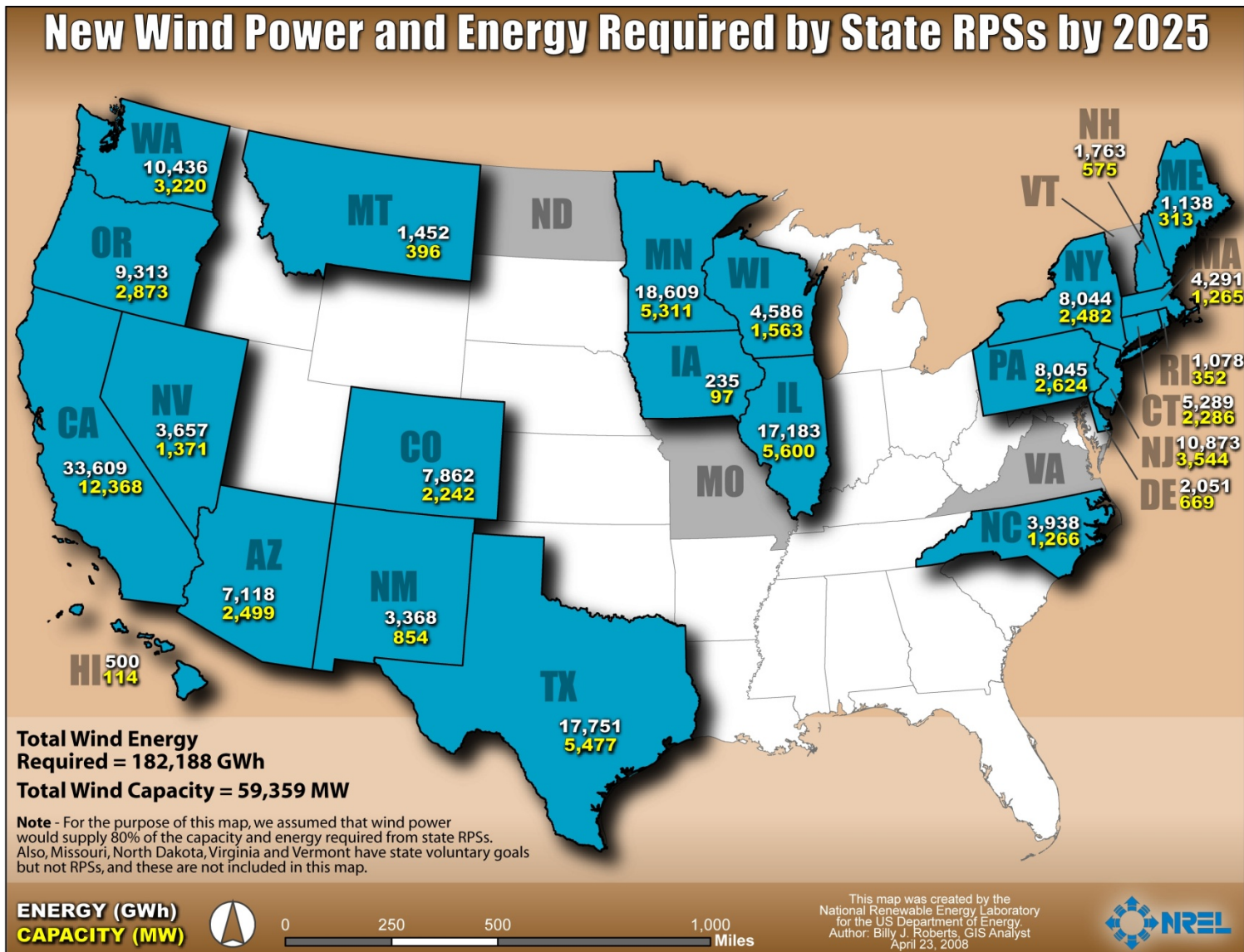
Much higher than historic patterns: ~ 2\$B in 90s.

# Drivers/Issues

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- **Transmission cost allocation: “who pays what” can determine whether transmission lines are built or not.**
- **Cost allocation can be contentious across multi-state paths.**
- **Several RTOs and transmission providers have experimented with innovative cost allocation strategies.**

# State Policies



# Cost Allocation Requirements:

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**Clear for Interconnection and Reliability Upgrades but not for Economic or Policy Upgrades.**

**•Interconnection: Facilities to tie new generation to the network -**

- Generators generally pay for direct connection lines, but can be reimbursed over time for network upgrades.

**•Reliability Upgrades: Facilities to serve load reliably and to meet NERC reliability requirements -**

- 100% paid for by load;
- Important - transmission congestion is not necessarily alleviated through reliability upgrades.

# Cost Allocation Requirements: (cont.)

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- **Economic/Policy Upgrades:** To access new generating resource areas, enhance competitive markets or to meet other policy requirements (RES) -
  - Typically has to meet cost-benefit test requirements;
  - May have to be included in regional transmission plan.

**Few economic transmission projects have gone forward.**

**As a result, individual RTOs (e.g., CAISO, PJM) either have or are considering revamping transmission plans to include “public policy requirements.”**

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# Some Innovative Approaches to Cost Allocation

[See NREL Report for greater detail.]



# SPP

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## Oct 2008 FERC Approval for **Balanced Portfolio** provided:

- Benefit-to-cost ratio for 10 years is greater than 1.0
- The portfolio is balanced – each zone has a positive benefit-to-cost ratio

## June 2010 FERC Approval for **Highway/Byway** Cost Allocation:

- Facilities above 300kv , 100% assigned to regional postage stamp rate
- Facilities between 300kv and 100 kv, 33% regional 67% zonal
- Below 100kv, 100% zonal

# BPA-Non RTO

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## **Bonneville Power Administration: Network Open Season —**

**Started in 2008 to reduce overloaded queue issues:**

- **Annual open season where customers sign an agreement and provide refundable deposit.**
- **BPA does cluster study and financial analysis to see if they can move forward on embedded rates.**
- **If rates would be greater than embedded costs, agreement would be considered terminated.**

# Proposed FERC Rule on Transmission Planning and Cost Allocation

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- **Transmission providers and RTOs must incorporate public policy requirements into transmission plans (e.g., state RPS policies).**
- **Every transmission provider must:**
  - **Participate in regional transmission planning;**
  - **Coordinate with neighboring regional transmission planning processes;**
  - **Propose transmission cost allocation criteria that may differ by type of transmission project (e.g., reliability, economic, or public policy-driven).**

# **Proposed FERC Rule on Transmission Planning and Cost Allocation (Cont.)**

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- **FERC to impose a transmission cost allocation methodology on a case-by-case basis if a region cannot reach agreement.**
- **Strong indication that FERC will propose “beneficiary pays” transmission cost allocation.**

# Conclusions

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- **This has been “highlights only”. See the Report for more topics and greater detail.**
- **Cost allocation criteria clear for interconnection and reliability-driven transmission projects, but not for economic transmission projects.**
- **New proposed FERC transmission rule incorporates public policy requirements into transmission planning.**

# Questions?

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