

Transmission Cost Allocation in New England

ISO New England
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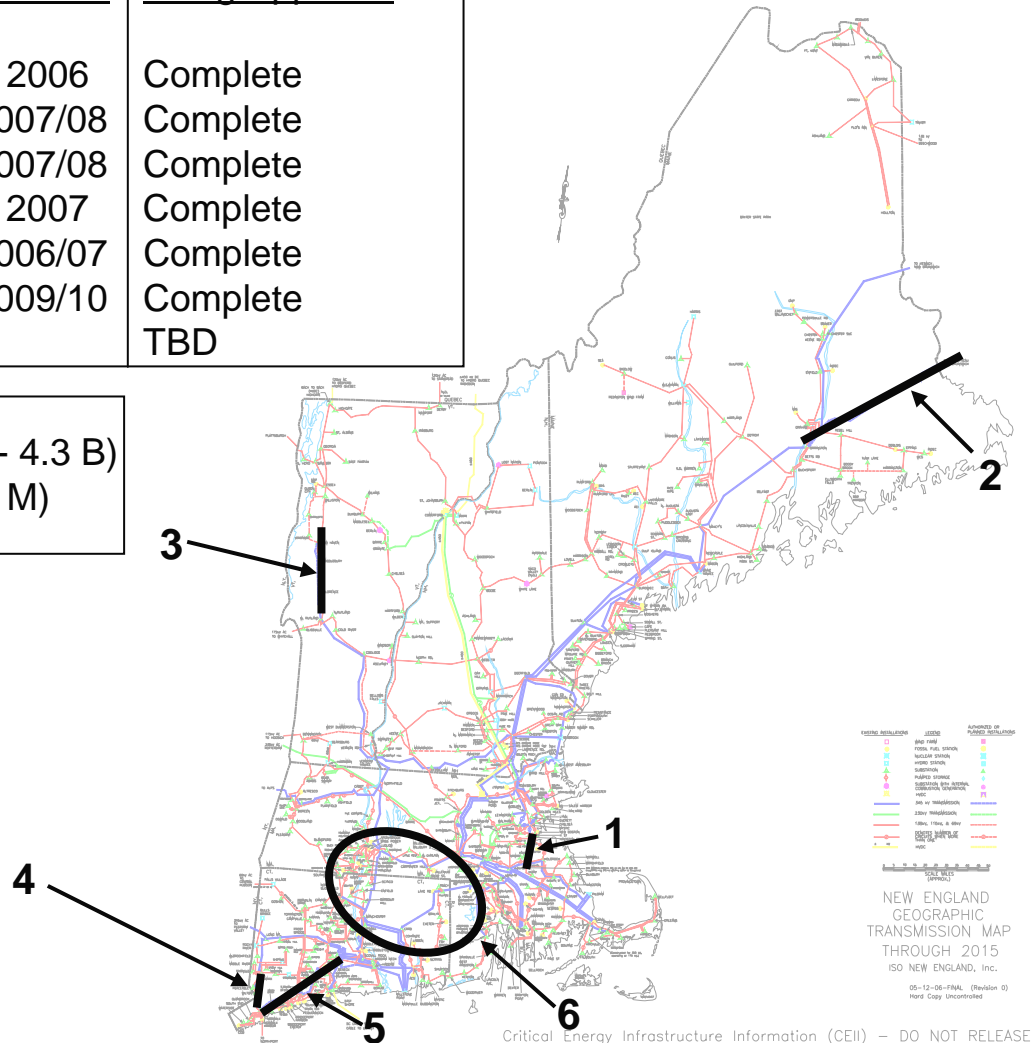
Background

- In New England, transmission is backstop to competitive market solutions
- Directed to establish objective non-discriminatory transmission cost allocation default mechanism (2002)
- Consistent with beneficiary pays principle and to allow the building of needed transmission
- Extensive stakeholder process
- Consensus view of appropriate allocation method for New England reached

Transmission Progress in New England

	<u>In Service Date</u>	<u>Siting Approval</u>
1. NSTAR Boston Import		
a. Phase I	Summer 2006	Complete
b. Phase II	Winter 2007/08	Complete
2. 2nd New Brunswick Tie	Winter 2007/08	Complete
3. NWVT Reliability	Summer 2007	Complete
4. SWCT Phase I	Winter 2006/07	Complete
5. SWCT Phase II	Winter 2009/10	Complete
6. So. NE Reinforcement	TBD	TBD

Total Projects in the Plan: 253 (\$2.6 - 4.3 B)
 Projects Completed: 140 (\$504 M)



Critical Energy Infrastructure Information (CEII) – DO NOT RELEASE

Overall Transmission Development Process

- Identify needs
- Derive possible solutions
- Define project
- Achieve Reliability and Cost approvals
- Begin state siting
- Stakeholder input throughout

Types of Transmission Upgrades

- Generation Interconnection
- Elective Transmission
- Merchant Transmission
- Local Benefit Upgrades
- Regional Benefit Upgrades
 - Reliability and Economic
 - May include Localized Costs

Cost Allocations

- Participant Funding
 - Payment for transmission upgrades by entities that request, require or voluntarily undertake the building of new transmission
 - Beneficiaries are clear
 - Private market-based investment
 - Agreements among certain parties

Cost Allocations (cont.)

- Regional Cost Sharing
 - Facility costs rolled into regional transmission rates paid by all network transmission customers
 - Network-wide benefits throughout the system over its life
 - Reliability and Economic Upgrades
- Local Cost Support
 - Paid by subset of transmission customers through Local Network Service rates
 - Local benefit only

Role of Regional Planning in Determining Regional Funding

- Marketplace has the first opportunity to provide participant funded solutions to identified system needs
- Transmission projects a backstop in the event of inadequate market response
- Only Regional Benefit Upgrades defined through planning process eligible for default cost allocation (regional cost sharing)
- Planning process, combined with the cost review, ensures regional costs are justified

Participant Funded Upgrades

- Generation Interconnection
- Elective Transmission
- Merchant Transmission
- Local Benefit Upgrades
- Localized Costs

Regional Cost Sharing: Reliability Upgrades

- Transmission upgrades necessary to ensure continued reliability of system
 - Takes into account:
 - Load growth and other known resource changes
 - Stability response, short circuit capability, voltage levels, thermal capability
 - Good utility practice and compliance with reliability standards
- Facilities rated 115-kV and above

Regional Cost Sharing: Economic Upgrades

- Upgrades defined in planning process to provide net economic benefits to the region
 - Estimates energy costs, operating reserve costs, system losses, capacity costs
 - Analyzes load projections, generator availability, fuel costs, proposed system enhancements such as transmission additions, demand side resources and new/retired generators

Local Cost Support

- Local Benefit Upgrades
 - Voltage and functionality test to determine if the upgrade only benefits a certain area/customers
 - Facilities rated below 115-kV
 - 115-kV and above without capability to flow in both directions
- Localized Costs
 - Costs included in Regional Benefit Upgrades that are not justified for regional cost sharing
 - Examples: Incremental costs of “gold plated” facilities or unjustified underground construction

Regional Benefit Upgrades Undergo Extensive Cost Review

- Upgrade applicant provides detailed information to ISO New England
 - Technical analysis of project
 - Alternate designs
 - Description of benefits
 - Timing of implementation
- A second cost review must be conducted if project costs increase (by 10%)
- Public meetings for large projects (\$100 million and above)

Regional Cost Sharing Appropriate Default for New England

- Tightly interconnected network
- Upgrades of a sufficient size provide diffuse benefits
- Beneficiaries can shift dramatically and over time
- Avoids free riders
- Avoids lengthy case-by-case determinations of benefits
- Easy to understand and implement