

New England Ties Northeast Coordinated System Plan

IPSAC05

December 14, 2007



New England Scenario Analysis

- Tool for stakeholders and policymakers, not a plan
- Evaluates impact of resource alternatives for the future – 2020 and beyond
- Provides relative market costs and economics of new investment
- Quantifies environmental impacts
- Shows impact of Energy Efficiency and Demand Response

New England Scenario Analysis Results

- Energy prices and air emissions
 - Vary with different technology alternatives
 - Influenced by the relative costs of natural gas and oil as they affect generation dispatch
- Fuel diversity
 - New England will have continued heavy dependence on natural-gas fired generation
- Carbon Emissions
 - Several strategies will be needed to meet New England's challenging goals for reducing CO₂
- Demand side resources
 - Adding significant demand-side resources provides capacity and electric energy benefits to the system and results in reduced emissions

New Ties with Neighboring Systems

- Share installed capacity
- Transfer economic energy
- Provide access to renewable resources
 - Labrador
 - The Maritimes
 - Quebec
 - New York and points west
- Relief of loss of source contingency constraints
- Improve fuel diversity situation
 - Consistent with previous JIPC studies

Process

- Determine need for Economic Upgrades to increase transfers with Eastern Canada
 - Expansion of Canadian resources will be discussed at the Planning Advisory Committee (PAC) meeting scheduled for December 18
 - Consistent with Order 890, meetings with PAC will be held by April to prioritize studies of Economic Upgrades
 - New England to hold stakeholder process to review OATT criteria for Market Efficiency upgrades to transmission system in 2008
- Consider additional ties with New York
 - Relieve north-south flows in the Hudson Valley
 - Increase N-1-1 operational flexibility in New England
 - Improve transfers between the systems

Possible Upgrades

- ISO-NE will work with stakeholders and neighboring systems to
 - Establish need for improvements
 - Identify feasible Upgrades to increase transfers with Canada
 - Identify feasible Upgrades to increase transfers with New York
- Possibilities may include
 - HVDC tie(s) with Quebec
 - HVDC or EHV ties with the Maritimes
 - Expand or upgrade ties between New York and New England