



ISO New England: Delivering Value to the Region

Introduction

ISO New England (ISO-NE) is an independent, not-for-profit corporation created in 1997 to oversee New England's electric system, which serves the power supply needs of the region's 6.5 million businesses and households. ISO-NE is responsible for the day-to-day management of the bulk electric system and competitive wholesale electricity markets serving all six New England states, valued at more than \$7.25 billion. ISO-NE also is responsible for long-term planning and coordination of the regional transmission grid and has the important role of ensuring nondiscriminatory access to the transmission system for all market participants. Each of these responsibilities plays a significant role in enhancing the reliability and efficiency of the region's electric system. Because these tasks are conducted by a not-for-profit company that is financially independent of companies doing business in the electricity market, the region's consumers are the direct beneficiaries of the ISO's work.

Building a Power System to Meet the Region's Electricity Needs

Since its inception, ISO-NE has worked collaboratively with its stakeholders across the region, including market participants and regulators, to ensure New England's restructured electric power system is reliable and meets the needs of the region's residents and its fast-growing economy.

Infrastructure Ensures Reliability

ISO-NE has brought about a host of cost-effective, critically important infrastructure improvements for staying ahead of New England's increasing demand for electricity:

- Approximately \$6 billion in private investment in new power plants in New England from 2000 to 2004
- A 30% increase (9,000 MW) in modern and more efficient supply
- Reduction of harmful air pollutants, including 6% lower carbon dioxide emissions, 32% lower nitrogen oxide emissions, and a 48% reduction of sulfur dioxide emissions
- Design and implementation of a collaborative regional system planning process, incorporating the evolution of new technologies as well as demand-side resources, which has been recognized by the U. S. Department of Energy as one of the best in the nation
- Siting approval of five major bulk transmission system projects (345 kV) totaling more than \$1.5 billion in four states, addressing transmission bottlenecks in existence for the past 10 to 20 years

Competitive Markets Ensure System Efficiencies

Beginning in 1999, ISO-NE launched competitive wholesale markets to govern the cost of providing power to consumers for the first time in New England. The implementation of New England Standard

Market Design (SMD) in 2003 initiated a number of improvements to promote the efficient use and operation of generation and transmission facilities. These improvements include new electricity markets; risk management tools, including a multi-settlement energy market and auctions for Financial Transmission Rights that provide participants responsible for serving retail customers with a financial hedge against differences in locational marginal prices due to transmission congestion; new demand-response programs; and an innovative forward market to procure operating reserves. All of these improvements have contributed to increased generator availability and improved system performance.

A Single Point of Control Ensures Reliability and Efficiency

As the transmission provider for the region, ISO-NE has full operational control of the bulk power transmission system within its footprint. This control provides the ISO with the decision-making authority to operate the power system to maintain reliability throughout the region and schedule maintenance outages in a way that reduces the added costs associated with having to dispatch more expensive power plants. Through this broad oversight and visibility of the transmission system, ISO-NE has reduced inefficiencies and bottlenecks on the power system and their related congestion costs by approximately \$40 million per year between the summer of 2000 and the summer of 2004, saving consumers a total of approximately \$160 million.

A History of Transparency and Stakeholder Collaboration

ISO-NE fully supports the desire of the Federal Energy Regulatory Commission (FERC) and stakeholders to ensure ISO and Regional Transmission Organization (RTO) operations are cost effective and include processes that are open and visible to the public. ISO-NE's services and their corresponding value for consumers have been built through a robust stakeholder process that includes review of operating and capital costs. Additionally, the vehicle through which ISO collects expenses from customers (i.e., ISO-NE's tariff) is a result of an agreement reached in 1998 among ISO-NE's customers. Each year since then, after thorough planning and vetting with New England Power Pool (NEPOOL) participants and stakeholders, ISO-NE files its budget with the FERC for approval. As a result, NEPOOL participants have overwhelmingly supported ISO-NE's annual budgets. Further, as additional improvements are pursued and new initiatives are planned and developed, the costs associated with these new initiatives are vetted with all stakeholders prior to implementation.

Achieving Lasting Value

In New England, the ISO's capital budget growth over the past five years has been due primarily to the development, implementation and enhancement of SMD. SMD has delivered, and will continue to deliver, value to the New England system for many years to come. As a result, these costs are an investment in the future of the region.

Each year, the number of market participants who previously had little or no market access has grown. ISO-NE has seen a 71% increase in the number of market participants since the markets opened in 1999. Moreover, ISO-NE has taken on the responsibility for providing services, such as outage coordination and scheduling to name a few, once performed by each of the region's seven transmission companies in a decentralized, less efficient manner. Although the number and breadth of services offered continues to grow each year, stringent financial management has led to a leveling of operating and capital costs.

In 2006, ISO-NE will continue to carry out its expanded mission without increasing its staff or operating budget. In fact, ISO New England's total proposed budget for 2006 is below 2004 levels. In comparison with other ISO/RTOs with fully functioning markets, ISO-NE's operations cost the least.

Managed Investment Brings Sizable Returns

ISO New England's management of the power system has resulted in significant investment in new power plants, market systems, information technology and progress in needed transmission projects. This progress has had real, quantifiable benefits for consumers. ISO estimates an average annual wholesale market savings of \$700 million can be attributed to these improvements. This translates to a savings of \$3.50 monthly for the average New England ratepayer. When compared to an increased cost of \$.50 cents per month for ISO services since deregulation began, the average ratepayer realizes a return of 700 percent.

Well Positioned for the Future

In 2005, ISO New England became New England's RTO, granting the ISO broader authority over the day-to-day operation of the region's transmission system and ensuring greater independence to effectively manage the region's bulk electric power system and competitive wholesale electricity markets.

Having created a solid foundation from which to deliver efficient market outcomes and a reliable bulk electricity system, ISO-NE is well positioned to create even greater benefits for consumers as the system matures. This will include adding further innovation, maintaining a reliable system that consumers can depend on into the future, achieving greater efficiencies to reduce delivery costs, and responding to future market and technology challenges.