



CONSERVATION LAW FOUNDATION

Sandra Levine
Senior Attorney

**Federal Energy Regulatory Commission
Demand Response in Organized Electric Markets
AD08-8
Technical Conference
May 21, 2008**

**Demand Response in Organized Markets
Barriers to Comparable Treatment and Solutions to Eliminate Potential Barriers:
ISO New England, NYISO and PJM**

Introduction:

Tremendous opportunities exist for demand response and other demand-side resources to more fully participate in organized electricity markets. A fair recognition of the value of these resources and providing fair treatment for their participation in markets is needed if society is to fully realize the cost savings, reduced pollution and improved reliability that greater reliance on demand-side resources allows.

Rising fuel prices and construction costs, the need to aggressively address global warming, and the difficulty siting and permitting new transmission and generation facilities highlight the very real benefits of eliminating barriers to participation of demand-side resources in organized power markets.

Eliminate Barriers for All Demand-Side Resources:

A wide range of demand-side resources should be provided comparable treatment in organized markets. Demand response is just one type of demand-side resource. Energy efficiency and other technologies that achieve customer reductions in energy consumption can help meet overall power needs, reduce congestion and improve reliability. Barriers to comparable treatment of these resources should also be eliminated.

Barriers to Comparable Treatment:

Barriers to comparable treatment fall into three general categories that have the effect of failing to provide a level playing field for demand-side resources.

15 East State Street, Suite 4, Montpelier, Vermont 05602-3010 • 802-223-5992 • Fax: 802-223-0060 • www.clf.org

MASSACHUSETTS: 62 Summer Street, Boston, Massachusetts 02110-1016 • Phone: 617-350-0990 • Fax: 617-350-4030

MAINE: 14 Maine Street, Brunswick, Maine 04011-2026 • 207-729-7733 • Fax: 207-729-7373

NEW HAMPSHIRE: 27 North Main Street, Concord, New Hampshire 03301-4930 • 603-225-3060 • Fax: 603-225-3059

RHODE ISLAND: 55 Dorrance Street, Providence, Rhode Island 02903 • 401-351-1102 • Fax: 401-351-1130

CONSERVATION LAW FOUNDATION

1. Funding Parity

Demand-side resources that can help meet system reliability needs should have the same funding opportunities available as transmission facilities proposed to meet reliability needs. Without funding parity, demand-side resources face a significant barrier and will always be at a disadvantage despite lower costs or reduced impacts. If the costs of regional transmission facilities can be spread among the region's customers that benefit from them, but the costs of demand-side resources that would avoid or delay those same projects cannot be spread in the same manner, the playing field is not level. Instead, demand-side resources must meet tougher requirements than transmission resources in order to provide services and meet system needs.

2. Resource Valuation

Valuation of resources should recognize and provide fair compensation for the benefits and services provided by the resource. Where demand-side resources provide value for system reliability, load regulation or other grid services, the value of those services should be compensated. Resource valuation should recognize that resource characteristics are varied and that barriers can be eliminated only if resources have an opportunity to receive fair compensation that recognizes the differences in risk and benefits among alternative resources.

3. Planning Standards and Expertise

In transmission expansion planning, demand-side resources have typically been seen as square pegs for round holes. They are rarely included as possible solutions to reliability problems. More often they are simply included as an input to a demand forecast. Planners evaluating resource system needs often lack the experience, expertise or tools to evaluate adequately whether and how demand-side resources could contribute to meeting system needs. A lack of clear standards to identify needs that must be met and to evaluate the variety of ways to meet those needs creates a barrier. Standards that require all reliability solutions to look, act, and feel like transmission facilities will exclude many viable alternatives that would meet system needs and perform in a manner equivalent to transmission. Instead, standards should be based on ability to meet identified needs that should be clearly defined. Standards should not be so narrow that they exclude viable solutions.

Solutions to overcome barriers:

Solutions are available to overcome the identified barriers. Two examples from New England show possible solutions to overcoming barriers and providing a level playing field.

1. The ISO New England Forward Capacity Market:

The recently created Forward Capacity Market in ISO New England demonstrates that when markets allow demand-side resources to compete on equal footing with generation, barriers to their participation are reduced and the result is more robust competition and a greater diversity of resources.

CONSERVATION LAW FOUNDATION

The first Forward Capacity Auction resulted in new demand-side resources outperforming new supply by a nearly 2:1 ratio. As a result of the first auction, for every megawatt of new generation, there will be two megawatts of new demand-side resources in New England. The auction also shows a near doubling of the existing demand-side resources to meet future needs. This highlights the very real opportunities for significantly increasing demand-side resources to meet system needs. In terms of cost, the auction resulted in reaching the pre-determined “floor” price of \$4.50/kW-month with 2,000 megawatts of excess resources remaining.

Similar opportunities and solutions to overcome barriers also should be possible in other regions and other markets. Some factors that led to the success of reducing barriers to demand-side resources in the Forward Capacity Market that should be applicable to other markets include:

- An auction open to a variety of resources
- Explicit inclusion of demand-side resources as eligible to meet needs.
- Development of a distinct method to allow demand-side resources to be fully integrated as a qualified resource.

2. Funding Parity for Demand-Side Resources

A key solution to eliminate barriers to comparable treatment for demand-side resources is to provide comparable opportunities for funding and financing. Two examples exist in New England. The first is the inclusion of demand-side resources as eligible to meet an emergency reliability need in southwestern Connecticut. A significant portion of this emergency need was met with demand-side resources, including demand response. The second example is the current effort in Vermont to include non-transmission alternatives, such as demand-side resources, as eligible for region-wide cost allocation under the New England ISO Tariff. Vermont law supports resource parity for transmission planning and directs efforts to obtain:

“... regional cost support for the least cost solution with equal consideration and treatment of all available resources, including transmission, strategic distributed generation, targeted energy efficiency, and demand response resources on a total cost basis.”

Act 61 of the 2005 Vermont General Assembly.

Vermont’s utilities, regulators and businesses have approved a specific recommendation to the New England ISO to achieve resource parity and assure that non-transmission alternatives have the same access to region-wide cost allocation as transmission solutions.

Specific solutions to help eliminate barriers and achieve funding parity should include:

- Allowing demand-side resources that can meet regional reliability needs to be included in FERC tariffs.
- Where pooled funding mechanisms are in place for transmission facilities, allow pooled funding for demand-side resources.