

NYSERDA's
Peak Load Reduction Program
&
NY Independent System Operators
Demand Response Programs
presented to
National Workshop on State
Building Energy Codes

July 21, 2004

Agenda

- New York State Energy Research & Development Authority's (NYSERDA) Peak Load Reduction Program
- New York Independent System Operator (NYISO) Demand Response Programs
 - EDRP, ICAP/SCR, & DADRP
- Other related code issues

Health, safety, and energy efficiency standards are the primary responsibilities of New York State code officials.

However, concern is high in the state, where a few hours during the summer, electric reliability is a concern.

NYSERDA offers an incentive program, the Peak Load Reduction Program, which deals with electric system capacity constraints. NYC is a load pocket area where capacity constraint is critical.

NYSERDA Peak Load Reduction Program

Enable customers to participate
in Demand Response programs
at the NYISO

Peak Load Reduction Program

- Standard Offer/Open enrollment
- Performance based incentive (\$/kW reduced)
- Intended to foster NYISO DRP markets
- Targeted to projects that can be rapidly implemented
- Incentives are capped at 70% of project cost

There is greater funding in the downstate area to address capacity constraints:

Permanent Demand Reduction		Load Curtailment/Shifting		Dispatchable Emergency Generator	Interval Meters
Con Edison Service Territory	Non-Con Edison Service Territory	Con Edison Service Territory	Non-Con Edison Service Territory	Con Edison Service Territory only	Statewide
\$475/kW	\$225/kW	\$175/kW	\$45/kW	\$125/kW	\$2,500/meter PSC \$1,200/meter NYISO

Peak Load Reduction Program

Some measures that would qualify for funding include:

- thermal ice storage
- load shifting or curtailment
- EMS systems
- low sulfur diesel fuel
- switchgear
- interval meters

Peak Load Reduction Program

Since NYC is a non-attainment area, emergency generator initiative is of concern.

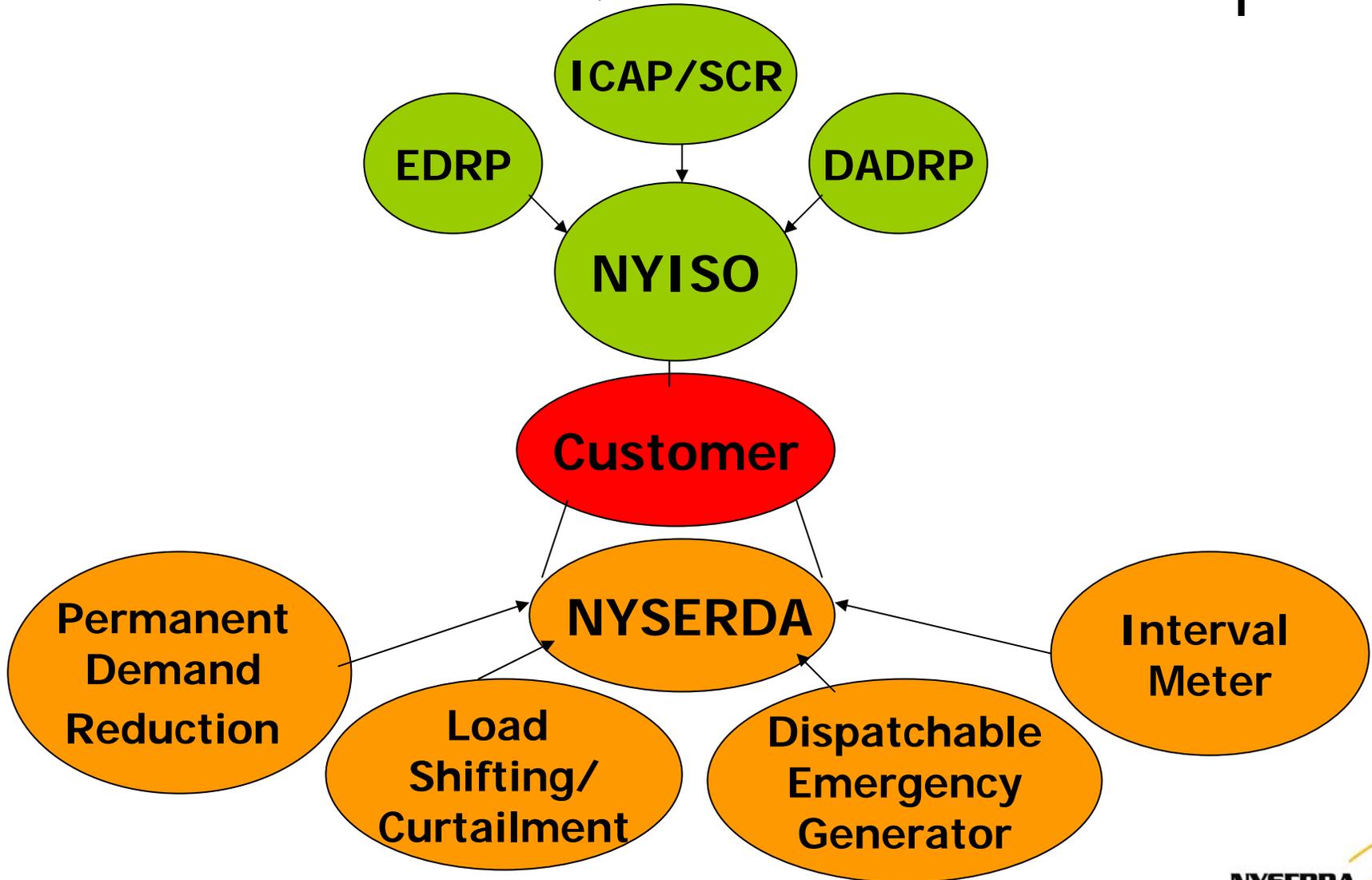
NOx emission requirements are in place to address this issue.

Peak Load Reduction Generator Enhancement and Replacement Requirements

- New units emissions must not exceed:
 - 18 lbs/MWh of NO_x
 - .70 lbs/MWh of PM₁₀
- New units must emit less than ½ the NO_x of the unit it's displacing
- Eligibility limited to facilities in Con-Edison service territory only and machines with NO_x emissions less than 35 lbs/MWh

NYISO Demand Response Programs

NYSERDA/NYISO Relationship



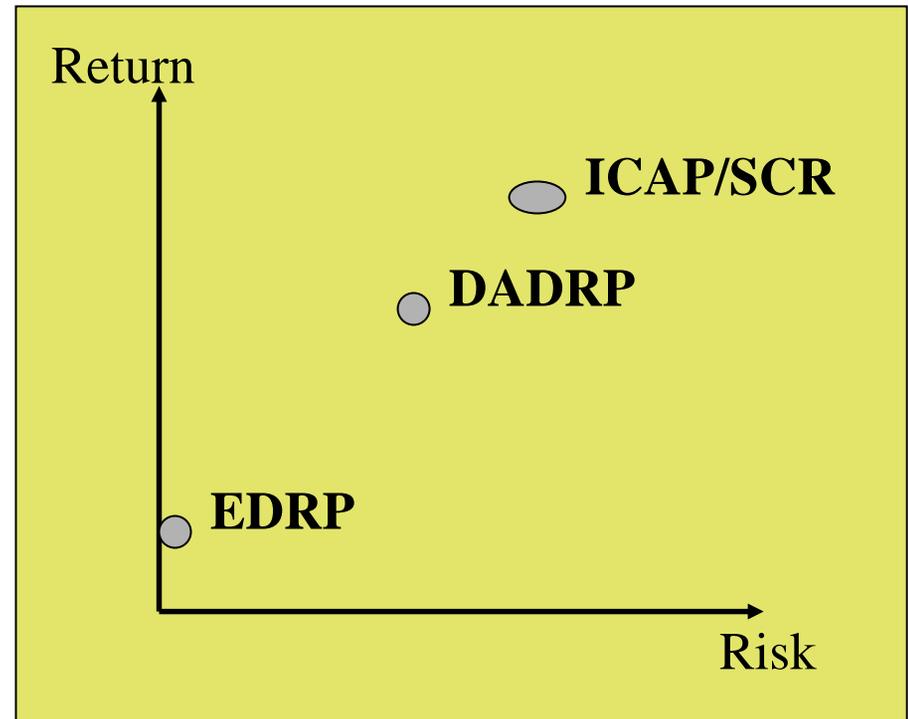
NYISO's Demand Response Programs

- Emergency Demand Response Program (EDRP)
- ICAP Special Case Resources Program (ICAP/SCR)
- Day-Ahead Demand Response Program (DADRP)

Programs are aimed at wholesale electricity market participants and NYISO direct customers

NYISO's Demand Response Programs

- **Emergency Demand Response Program (EDRP)**
 - Low Risk
 - Low/Moderate Return
- **Day Ahead Demand Response Program (DADRP)**
 - Moderate Risk
 - Moderate/High Return
- **Installed Capacity/Special Case Resources**
 - Moderate/High Risk
 - Moderate/High Return



Other Code Issues

Add to the 'scope' of the IECC

Future new construction codes can help to enable buildings for demand response.

Coordinate with new construction by:

- installing interval metering
- designing new MEP to segregate discretionary electric load

Addressing the Nat'l Appliance Energy Conservation Act (NAECA)

Energy Star raises the bar from NAECA.
EXAMPLE: NYSERDA's 'Keep Cool' was put in place in 2002 to incent customers when purchasing room a.c.'s. It was phased out in 2004, the market transformed, and customers are now asking for Energy Star air conditioners even without an incentive.

Peak Load Reduction Program

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