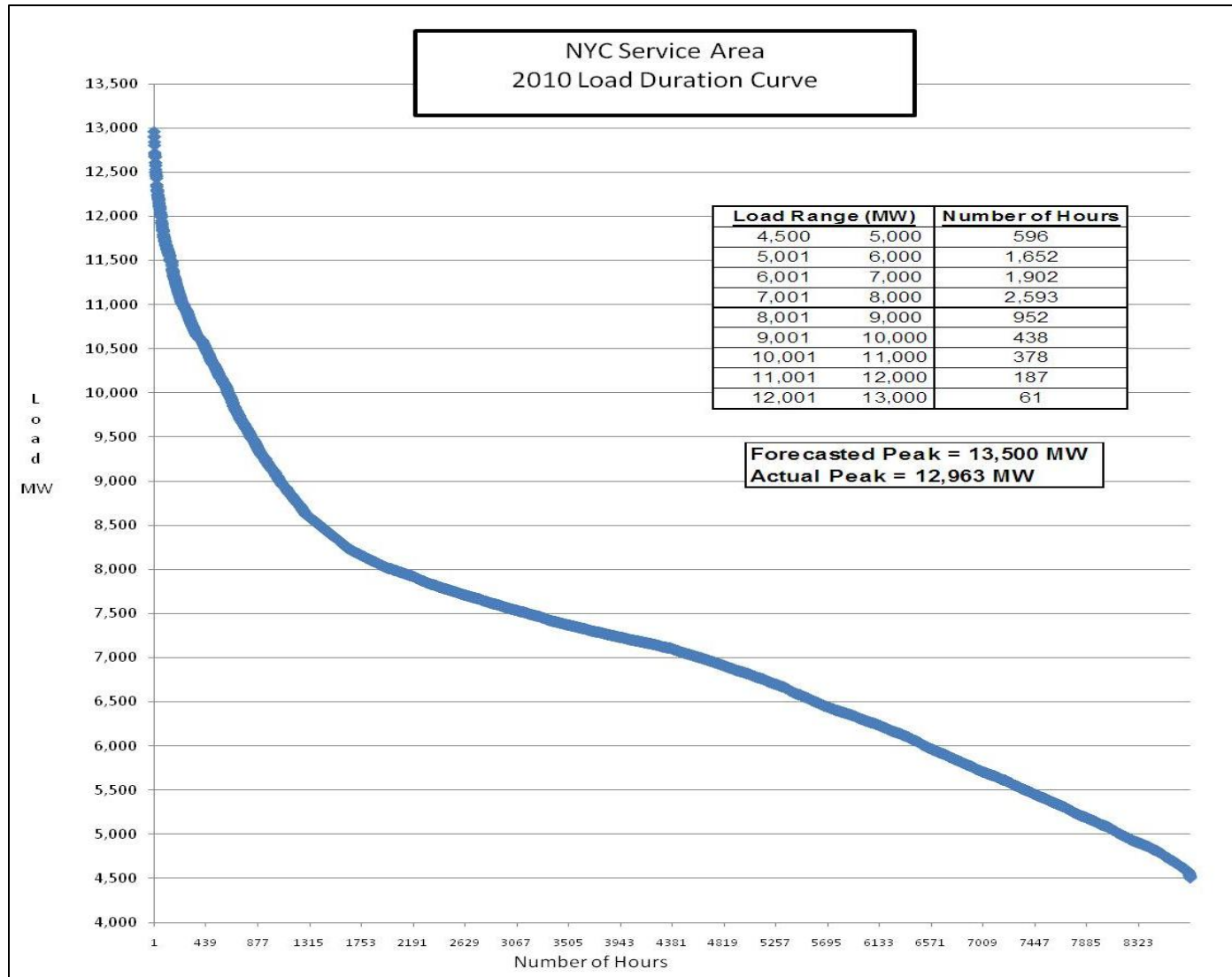


DR/EE/SG

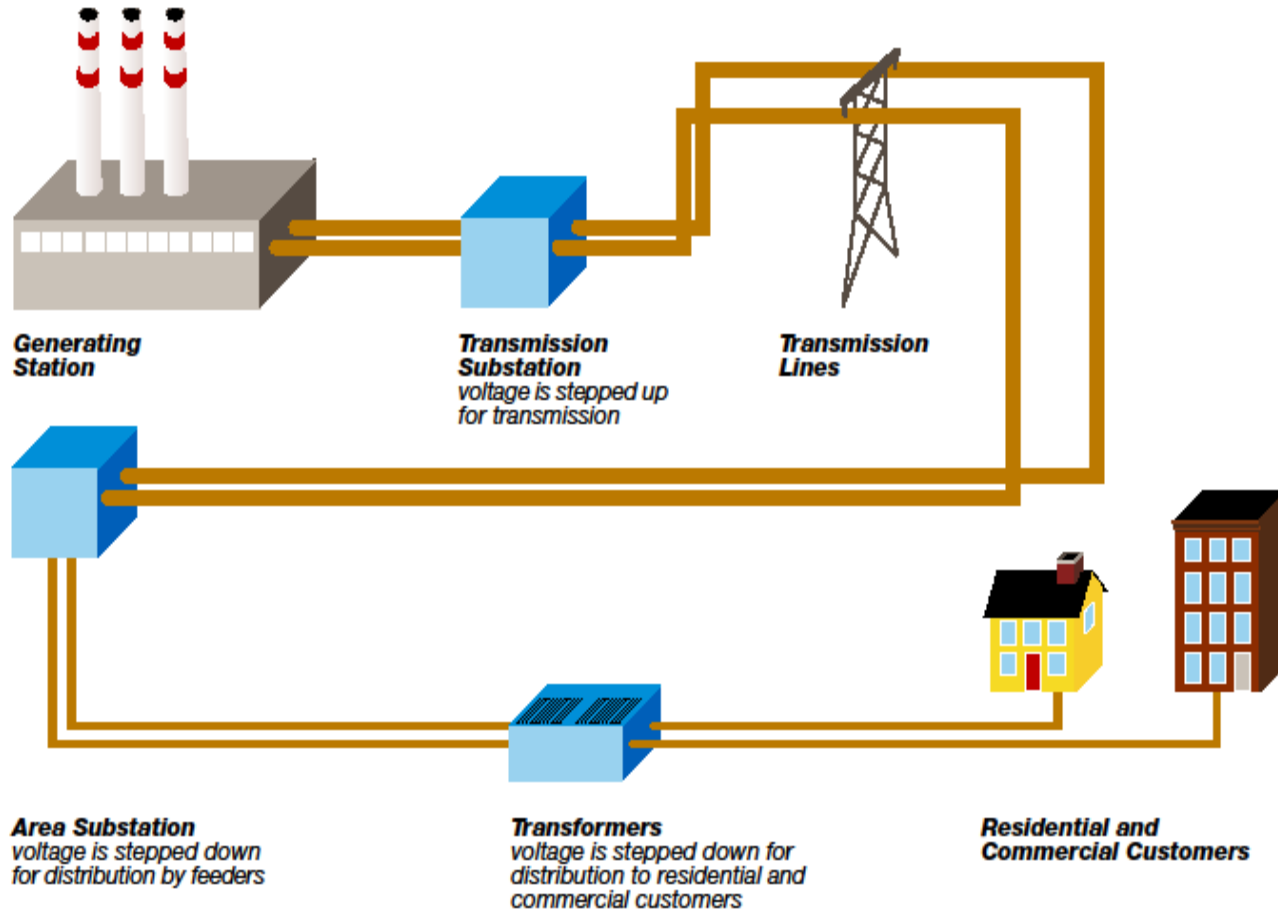
Sum Of The Parts



Peak Shaving Programs



Electric Generation to Customers



Con Edison - Commercial DR Programs

Program	Acronym	Purpose	Incentive
Emergency – (NYC and Westchester County)	DLRP(M) DLRP(V)	Activated by Con Edison in system critical situations (condition yellow or voltage reduction). Customers have 2 hours notice to begin response for five hour event duration. Premium paid for customers who pre-commit load.	(M)Customers receive a reservation payment of \$6.00 or \$3.00 per kW pledged and performed, depending on location, and energy payments \$0.50 per kWh. (V)Energy only option available for those who do not pre-commit kW.
Peak Shaving – (NYC only)	CSRP	Event activated when day-ahead forecast is 96% or greater of forecasted summer system peak to relieve system peak load. Requires a pre-commitment of load.	Customers receive a reservation payment of \$5/kW pledged and performed.
Peak Shaving – (NYC only)	CPRP	Event activated when day-ahead forecast is 96% or greater of forecasted summer system peak to relieve system peak load. Requires no pre-commitment of load.	Customers receive a reservation payment of \$5/kW performed.

NYISO DR Programs

Program	Acronym	Purpose	Incentive
Emergency Demand Response Program	EDRP	Deployed in energy shortage situations to maintain the reliability of the bulk power grid. EDRP is a voluntary program.	Energy Payment: Equal to the greater of \$.50 for each kWh curtailed, or the real-time zonal locational-based marginal price, but no less than \$.50 per kWh curtailed paid to CSP.
ICAP Special Case Resource	SCR	Deployed in energy shortage situations to maintain the reliability of the bulk power grid. SCR are paid a for commitment.	Energy Payment: Equal to the greater of \$.50 for each kWh curtailed, or the real-time zonal locational-based marginal price for an event, but no less than \$.50 per kWh curtailed paid to RIP Reservation (capacity): Monthly Capacity payment based on ICAP auction clearing price.
Day Ahead Demand Response Program	DADRP	Allows energy users to bid their load reductions, or “negawatts”, into the Day-Ahead energy market.	Market based.
Demand Side Ancillary Services Program	DSASP	Provides the opportunity to bid load curtailment capability into the DAM and/or Real-Time Market to provide Operating Reserves and regulation service.	Market based.

Potential kW Revenue Opportunity

	50 kW		100kW		250kW	
	2010	2011	2010	2011	2010	2011
Emergency (DLRP)	\$900	\$900	\$1,800	\$1,800	\$4,500	\$4,500
Peak Shaving (CSRP)	N/A	\$1,500	N/A	\$3,000	N/A	\$7,500
NYISO SCR	\$3,870	\$3,870*	\$7,740	\$7,740*	\$19,350	\$19,350*
Total	\$4,770	\$6,270	\$9,540	\$12,540	\$23,850	\$31,350

kW only revenue – DLRP and CSRP also pay \$0.50 per kWh reduced during an event

* Based on 2010 pricing



6.1 Million Window/Wall Air-Conditioners and counting!



Targeted Curtailment



Cyber Security enables secure communications for controlling and distributing energy across the electrical system, and maintaining consumer privacy. Cyber security must be implemented on all smart-grid assets and communications to provide reliable operation, and prevent cyber attacks.

Smart Building Technologies such as in-house energy management systems empowers customers to track their energy usage, receive informational messages from the utility, and participate in demand response programs.

Control Centers analyze critical information real time throughout the grid allowing us to manage, plan and forecast the energy system to meet ever-changing needs.

Intelligent Grid Systems use sophisticated communications technology that find problems on the grid and fix them faster, enhancing reliability.

Fuel Cells are high efficiency, ultra low emission energy sources which can be integrated into the electric system, lessening our dependence on foreign oil.

Feeder Switches can be controlled to isolate faults, restore service, and optimize load to improve grid efficiency.

Energy Storage Devices can be charged during "off peak" times and used to feed power back into the grid when needed.

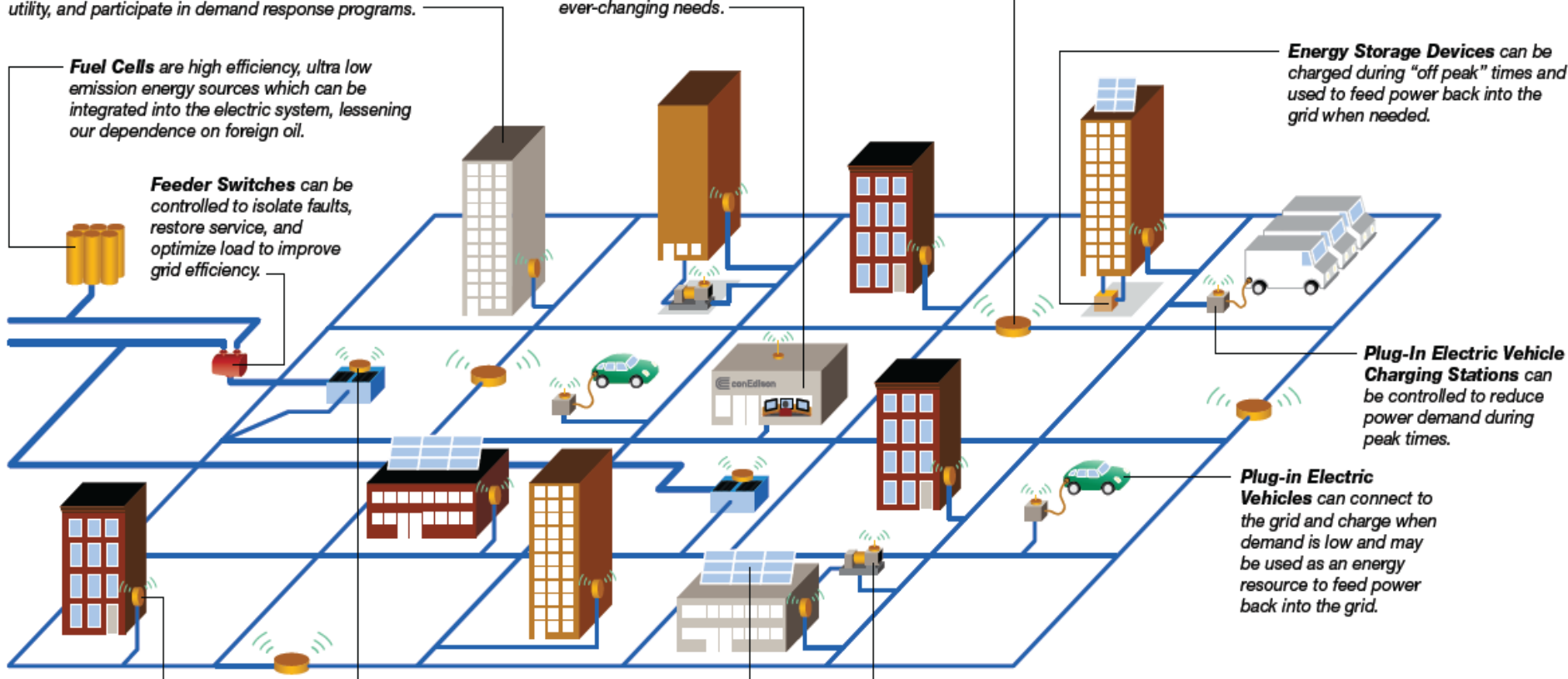
Plug-In Electric Vehicle Charging Stations can be controlled to reduce power demand during peak times.

Plug-in Electric Vehicles can connect to the grid and charge when demand is low and may be used as an energy resource to feed power back into the grid.

Smart Meters gather information about how customers are using energy, so we can monitor the supply more

Remote Monitoring Equipment provides information about the electrical system and feeds this data to load flow modeling software which can signal potential problems.

Distributed Generation Customers generate their own power and send excess energy back to the grid.



Incentives

- Demand Response

- Con Ed
- NYISO
- NYSERDA
- USGBC

- Energy Efficiency

- Con Ed
- NYSERDA

- Smart Grid

- Con Ed
- DOE
- NYSERDA

The challenge is align incentives and objectives!

A nighttime photograph of a city skyline, likely New York City, featuring a suspension bridge and a river. The buildings are illuminated, and the sky is dark. The text is overlaid on white rectangular boxes.

**THANK YOU FOR YOUR
ATTENTION TODAY**

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