

NYSERDA Programs

**ACEEE National Conference on Energy Efficiency and Reliability:
Lessons Learned in 2001**

Radisson Hotel Berkeley Marina

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Peak Load Reduction Program - Maintain System Reliability-Capacity

- PON 577-00

Summer 2001

- PON 620-01

(Next Version of 577-00)

Release – Late Fall, Summer 2002



PON 577-00

Peak-Load Reduction Program

Program Components:

- Permanent Demand Reduction Efforts.
- Short-Duration Load Curtailment. (NYISO EDRP)
- Dispatchable Emergency-Generator Initiatives. (NYISO EDRP)
- Interval Meters. (NYISO EDRP)



New York Independent System Operator Emergency Demand Response Program NYISO EDRP

- NYISO emergency call - customers curtail load
- Customers paid greater of \$500/MWh or LBMP (some restrictions)
- Minimum 4 hour call
- Voluntary program-no penalty for not curtailing
- Interval metering, M&V



PON 577-00

Peak-Load Reduction Program

Permanent Demand Reduction Efforts

- Focus on low cost short time frame energy efficiency efforts to cut peak demand.
- Applicants encouraged to aggregate individual facilities.
- Contractor prepares Technical Assessment and implements measures.
- Incentives based on kW reduction, PV also eligible.



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Peak-Load Reduction Program

Permanent Demand Reduction Efforts, cont'd

- **Incentives-75% of eligible costs capped at**
 - **Con Edison**
 - » \$375/kW (8/1/01)
 - » \$300/kW (9/30/01), PV - \$6/W ac (9/30/01)
 - » \$200/kW (10/31/01), PV - \$4/W ac (10/31/01)
 - **Outside Con Edison**
 - » \$125 kW (8/1/01)
 - » \$100/kW (9/30/01), PV - \$5/W ac (9/30/01)
 - » \$65/kW (10/31/01), PV - \$3/W ac (10/31/01)



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Peak-Load Reduction Program

Short-Duration Load Curtailment

- Incentives – position facility to be able to curtail loads.
- Load curtailed – EDRP call from NYSIO.
- Emergency/CoGen not eligible.
- Incentives- 75% of eligible costs capped at
 - \$150/kW (8/1/01), \$75/kW (9/30/01) Con Edison
 - \$50/kW (8/1/01), \$25/kW (9/30/01) Outside Con Edison



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Peak-Load Reduction Program

Dispatchable Emergency-Generator Initiatives

- Incentives – position facility to prepare E-Gen for participation in EDRP
- Environmental permitting guidance & support
- Con Edison service territory only.
- Incentives- 75% of eligible costs capped at \$100/kW (9/30/01)



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Peak-Load Reduction Program

Interval Meters

- Incentive for interval meters
- 75% of meter cost, \$2,000 cap.
- Revenue grade, NYISO M&V



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Peak-Load Reduction Program

Results

<u>Installed & Operational Measures as of September 30, 2001</u>			
<u>Component</u>		<u>Statewide kW</u>	<u>Con Ed kW</u>
SDLC		71,008	2,188
PDRE		2,924	1,661
DEGI		22,700	22,700
IM		10,900	8,900
TOTALS:		107,532	35,449



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Peak-Load Reduction Program

Results discussion-expected more activity in the PDRE component...long term benefit

- Limited PDRE activity statewide, especially Con Edison
- Very little SDLC activity in Con Ed
- Upstate SDLC primarily process



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Peak-Load Reduction Program

Increase PDRE activity statewide, Con Edison

- Incentives - increase ?
- Landlord/tenant issues in Con Edison
- Improve marketing - non-ISO related component
- Informal focus groups - Real Estate Prop. Mgrs., Trade Assoc., Consultants, Survey
-Time to do projects



PON 620-01

Peak-Load Reduction Program

- Maintain same program components w/enhancements
- Investigate potential options for emergency/backup generators
- Incorporate DLC into SDLC component
- Consultant assistance in customer support

Lessons to be learned....





BUILDING STATUS

-  Not Affected
-  Needs Cleaning
-  Damaged But Stable Ready for Occupancy With Repairs, Cleaning
-  Major Structural Damage Occupancy Not Permitted
-  Destroyed
-  In Danger of Collapse

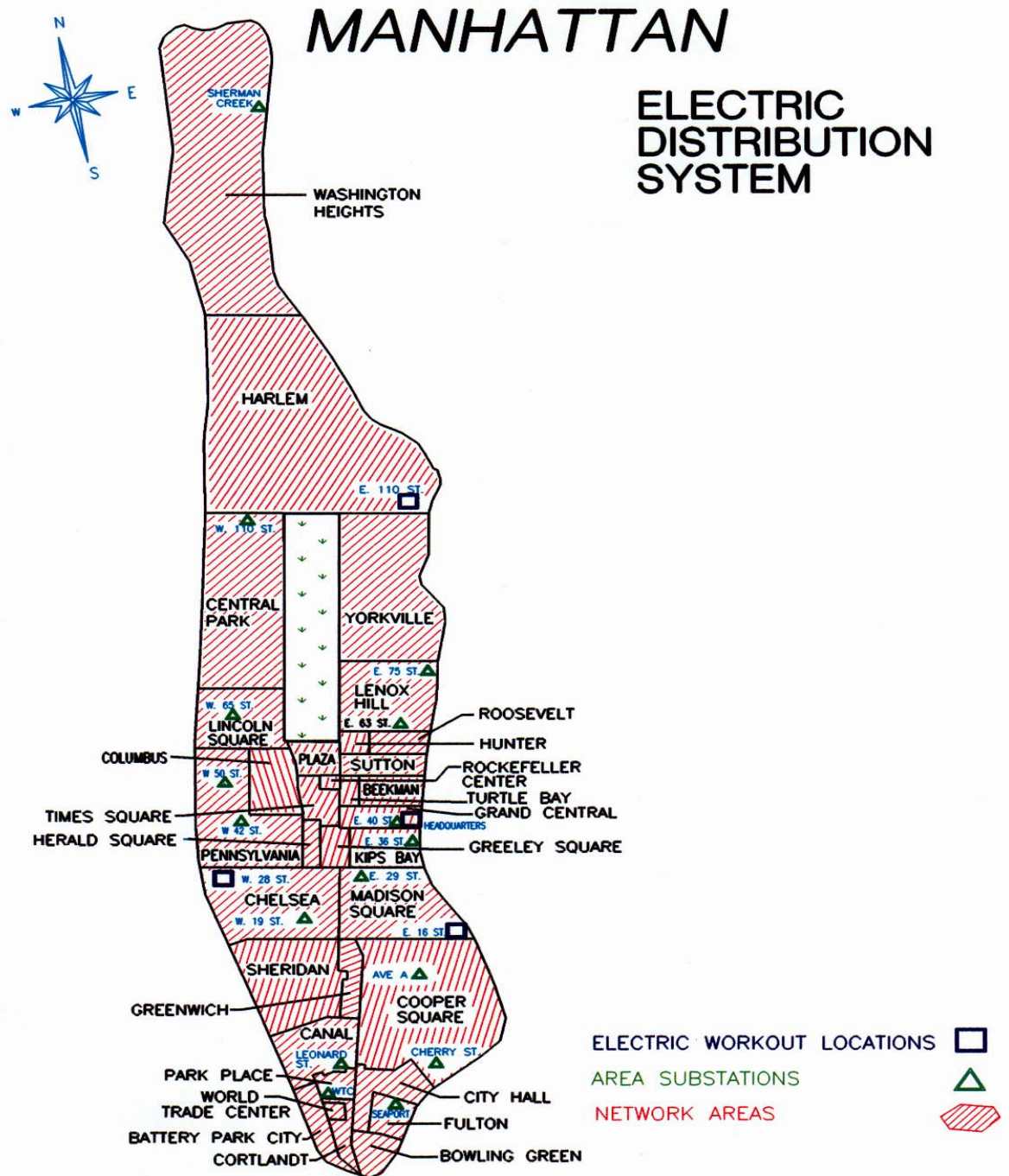
Post 9/11

Maintain System Reliability-Grid (Manhattan)

- WTC + Surrounding Bldgs 150 MW load loss
- 5 networks out, infrastructure band-aid, networks could be overly taxed in cooling season
- Clean up - numerous temporary services in Lower Manhattan, increasing loads
- Damaged space – gas/steam cooled, some new space incremental electric cooling, added load
- Ripple effect – Load/Relocation

Post 9/11 Maintain System Reliability-Grid (Manhattan)

Load Ripple Effect



Post 9/11 Maintain System Reliability-Grid (Manhattan)

Relocation Ripple Effect

- High density electric use tenants from damaged bldgs relocating to midtown-stress on already stressed grid
- High density electric use tenants not from damaged bldgs splitting into multiple locations



Post 9/11 Maintain System Reliability-Grid (Manhattan)

NYSERDA Response

- Coordinate closely with Con Edison, PSC and NYSERDA to address issues
- Investigating enhancing PON 620-01 to address these issues

