New York's DG Rule

Requirements for Demand Response Sources

Draft – for discussion purposes only

Existing Sources

- Sources that commenced operation prior to effective date of Part 222 (Fall 2006).
- Does not apply to sources subject to an NSPS rule.

Demand Response Sources

- Must be permitted.
- Emergency Use (500 hours/year)
  - or as limited due to New Source Review
  - operated when usual supply of electricity is not available
  - routine maintenance (one hour per week)
- In addition – may operate for up to 30 hours per year when called upon by a Demand Response Program Sponsor.

Demand Response Sources

- Emission Limits:
  - Effective Date: January 1, 2009
  - NOx: 9.0 g/bhp-h
  - PM: 0.10 lb/mmBtu or 85% control
  - Stack Test: by December 31, 2008

Demand Response Sources Capacity Limitations

- Sources subject to Part 222:

	NYCMA	Upstate
– January 1, 2007:	271.9 MW	111.4 MW
– January 1, 2011:	150.0 MW	100.0 MW
– January 1, 2014:	50.0 MW	50.0 MW

- Sources subject to an NSPS Rule:
  - not subject to capacity cap

Demand Response Sources

- List of sources that may participate will be maintained on DEC website.
- Guidance Document – development and maintenance of the Inventory of Demand Response Sources.

Existing Sources NOx Emission Limits

- Effective January 1, 2008
  - Microturbines: 0.54 g/bhp-h
  - Turbines (CH4): 50 ppmvd @ 15% O2
  - Turbines (oil): 100 ppmvd @ 15% O2
  - Rich Burn Engines (CH4): 3.0 g/bhp-h
  - Lean Burn Engines (CH4): 2.0 g/bhp-h
  - Diesel-fired Engines: 7.5 g/bhp-h
  - Stack Test by December 31, 2007

Emission Limits
Particulate Matter (PM)

- Oil-fired Sources Only
- Effective Date: January 1, 2008
  - 0.10 lb/mmBtu Heat Input; or
  - Ultralow sulfur diesel fuel + 85% Control

Distributed Generation Rule

- New Sources – Subject to an EPA New Source Performance Standard (NSPS)
  - 40 CFR 60 Subpart 4I (diesel engines)
    - Effective Date: July 11, 2005
  - 40 CFR 60 Subpart 4J (spark-ignition engines)
    - Effective Date: June 2006 (July 1, 2007)
  - 40 CFR 60 Subpart 4K (turbines)
    - Effective Date: February 18, 2005

Subpart 4I

- NOx, CO and PM
  - NOx Emissions: F(engine size, model year)
    - 3.0 – 4.8 g/hp-h (2007)
    - 0.3 – 2.6 g/hp-h (2012)
    - 0.3 – 0.5 g/hp-h (2015)
  - PM: G(engine size, model year)
    - 0.05 – 0.1 lb/mmBTU (2008)
    - 0.001 – 0.0074 lb/mmBtu (2015)

Subpart 4J

- NOx, CO, and NMHC
  - NOx:
    - 2.0 g/hp-h (2007-2009)
    - 1.0 g/hp-h (2009 -)
  - CO:
    - 4.0 g/hp-h (2007-2009)
    - 2.0 g/hp-h (2009 -)
  - NMHC:
    - 1.0 g/hp-h (2007-2009)
    - 0.7 g/hp-h (2009 -)

Subpart 4K

- NOx
  - H(turbine size, fuel used)
    - 0.15 – 0.78 g/hp-h (natural gas)
    - 0.44 – 1.86 g/hp-h (other fuels)

NSPS Compliance

- Emissions Testing
  - Subpart 4I – Manufacturer's Certification
  - Subpart 4J – Manufacturer's Certification is optional… if not certified – owner/operator must conduct stack test. Additional tests – every 3 years/8,760 hours operation for large engines (>500 hp).
  - Subpart 4K – Annual stack testing or CEMS.

Status of Part 222

- Stakeholder Meeting
  - Conference Call format
- Effective Date of Part 222 – January 2007