

# Recent Developments in USEPA Regulations

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**KCC**

# December 2011

- ◆ **Cross State Air Pollution Rule-stayed**
- ◆ **Mercury and Air Toxics Standard is now the final version of Utility MACT rule**

# CSAPR

- ◆ December 30, 2011 D.C. US Court of Appeals
  - *Stay of CSAPR*
  - *Continue CAIR*
  - *Hearing April 2012*
  
- ◆ What does the future hold?
  - *CSAPR 2013 ?*
  - *Revised CSAPR 2014/5?*
  - *CAIR Phase II 2015?*

# Mercury and Air Toxics Standards ( MATS)

- ◆ **Establishes limits for the emission of Mercury, Acid Gases, and Non-Mercury Toxic Metals from Coal and Oil Fired Electric Generating Units**
- ◆ **Effective Q1 2015**
  - *One year extensions possible to complete technology retrofits*
  - *Additional one year possible for reliability critical units*

# Applicability

## ◆ Coal-fired EGU

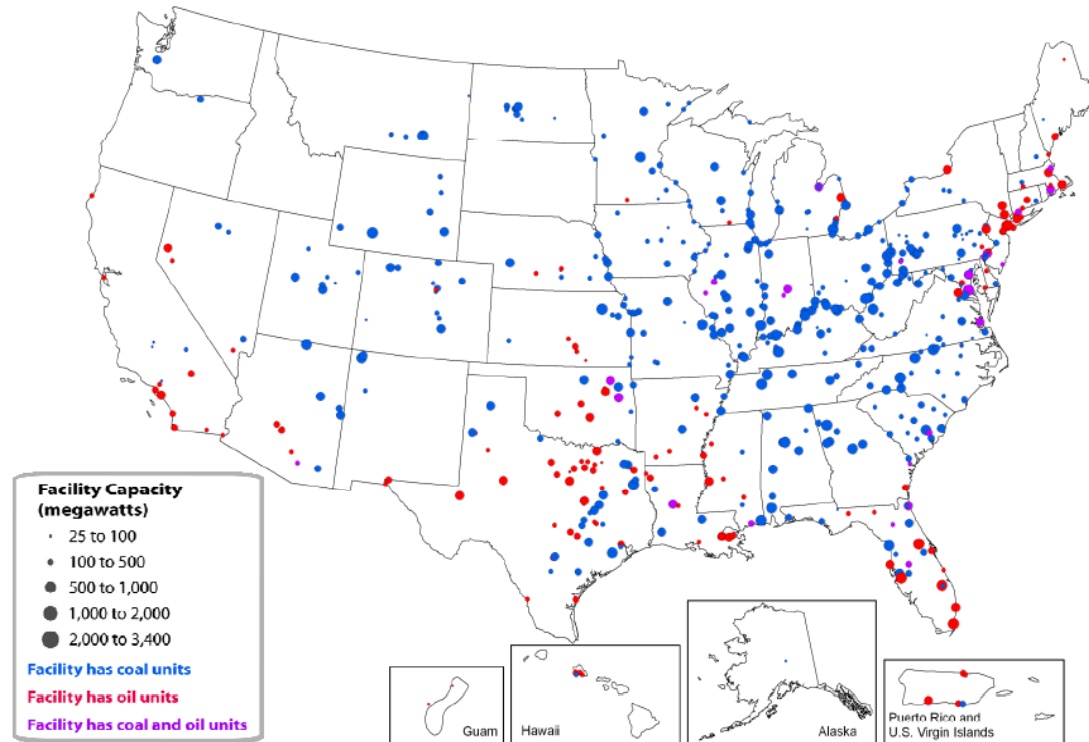
- *> 25 MW*
- *> 10% average annual heat input from coal during 3 consecutive years or*
- *> 15% annual heat input from coal during one year*

## ◆ Oil-fired EGU

- *Not coal fired*
- *> 25 MW*
- *> 10% average annual heat input from oil during 3 consecutive years or*
- *> 15% annual heat input during one year*

# 1100 Coal and 300 Oil EGUs Affected

## Location of Coal and Oil Power Plants



Source: National Electric Energy Data System (NEEDS 4.10 MATS) (EPA, December 2011) and EPA's Information Collection Request (ICR) for New and Existing Coal- And Oil-Fired Electric Utility Stream Generation Units (2010)

# NYCA Affected Units

## ◆ Coal

- *16 units*
- *2650 MW*

## ◆ Oil/Gas

- *31 units*
- *11650 MW*

# Emission Limits

## Existing Coal-fired EGU

	Filterable PM #/mmBTU	Non-Hg Metals #/mmBTU	HCl #/mmBTU	SO2 #/mmBTU	Hg #/TBTU
Limit	0.03		0.002		1.2
Alt. Limit		0.00005		0.2	

## Existing Oil-fired EGU

	Filterable PM #/mmBTU	HAP Metals #/mmBTU	HCl #/mmBTU	Fuel Moisture	HF #/mmBTU	Fuel Moisture
Limit	0.03		0.002		0.0004	
AltLimit		0.0008		1%		1%

Compliance is based on 30 day rolling averages or quarterly stack tests.

Output limits are based on 10,000 BTU/kwh heat rate equivalence.



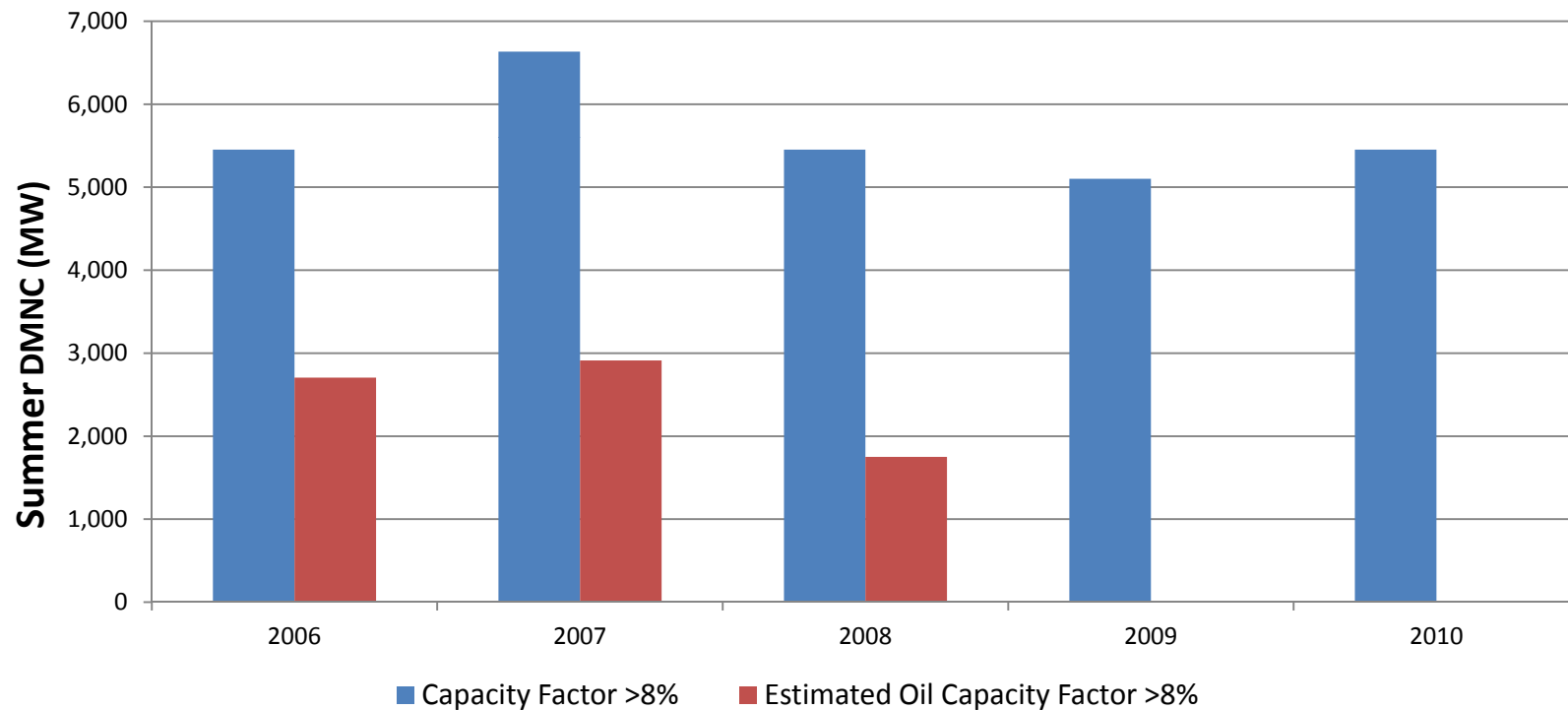
# Limited-use liquid oil-fired EGU

## ◆ **New subcategory**

- *“has an annual capacity factor of less than 8 percent of its maximum or nameplate heat input, whichever is greater, averaged over a 24-month block contiguous period commencing...”*
- *“This subcategory applies to oil-fired EGUs that operate on oil alone and act as peaking units, ...”*
- *USEPA states that intent is consider capacity factor on oil*

# How will the limited use oil-fired EGU subcategory be applied?

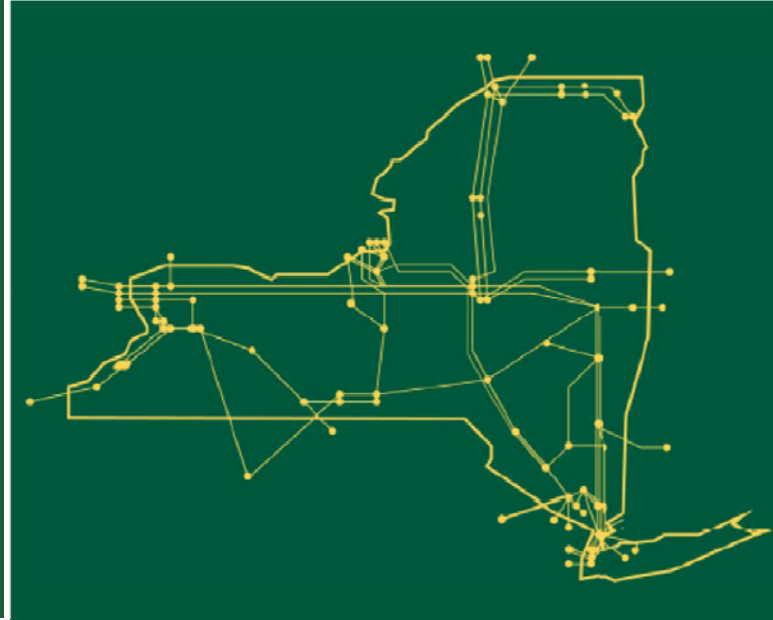
**MATS NYCA Gas/Oil Capacity**



# USEPA Cost Impacts

- ◆ **Cost are estimated beyond the costs for CSAPR**
- ◆ **USEPA projects a \$0.003/kwh increase in retail prices in NY**
  - *2.2% increase beyond costs of CSAPR*
  - *\$588 Mil/yr.*
- ◆ **Annualized retrofit costs**
  - *Oil-fired units*
    - 3117 MW
    - \$33 Mil/yr.

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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