



10<sup>th</sup> Annual

**COAL TRADING CONFERENCE**

---

December 6, 2011 New York

Session 2: Legislative & Regulatory Issues:

Potential Impact on Coal Trading  
Market Implications of Environmental Regulations

***Gary R Hart***  
***ICAP Energy***  
***Birmingham, Alabama***  
***205 978 6486***  
***gary.hart@us.icapenergy.com***



since 1988 ? .....23 years ....I really need to get a life !



July 2009

“Much has been written about the (SO<sub>2</sub>) program, and this isn’t the place for a comprehensive review. Suffice it to say that it has succeeded spectacularly. Between 1995 and 2007, the trading program will result in greater reductions on a much faster schedule than likely would have been the case under more traditional technology-based standards, and will save more than \$20 billion dollars cumulatively over that period of time. **Even the most vocal *ex ante* critics of emissions trading now agree that the SO<sub>2</sub> program has been a raging success.**”

Paul Portney – President Resources for the Future (DC) Oct. 2004 Enviro. Finance Mag.

# CASPR and Cap and Trade

- Obama Administra
- Just a giant govt. ru
- This brought about
- Congressman Bouc
- EEL on stage with K**
- CSAPR is **NOT** a tru



is a **100% AUCTION** proposal  
for new programs  
yes on today  
2454 but it **cost him his job**  
ing draft of CO2 proposal  
CAAA of 1990 (Acid Rain)

---

***“We don’t  
inte  
EPA’s Assis***

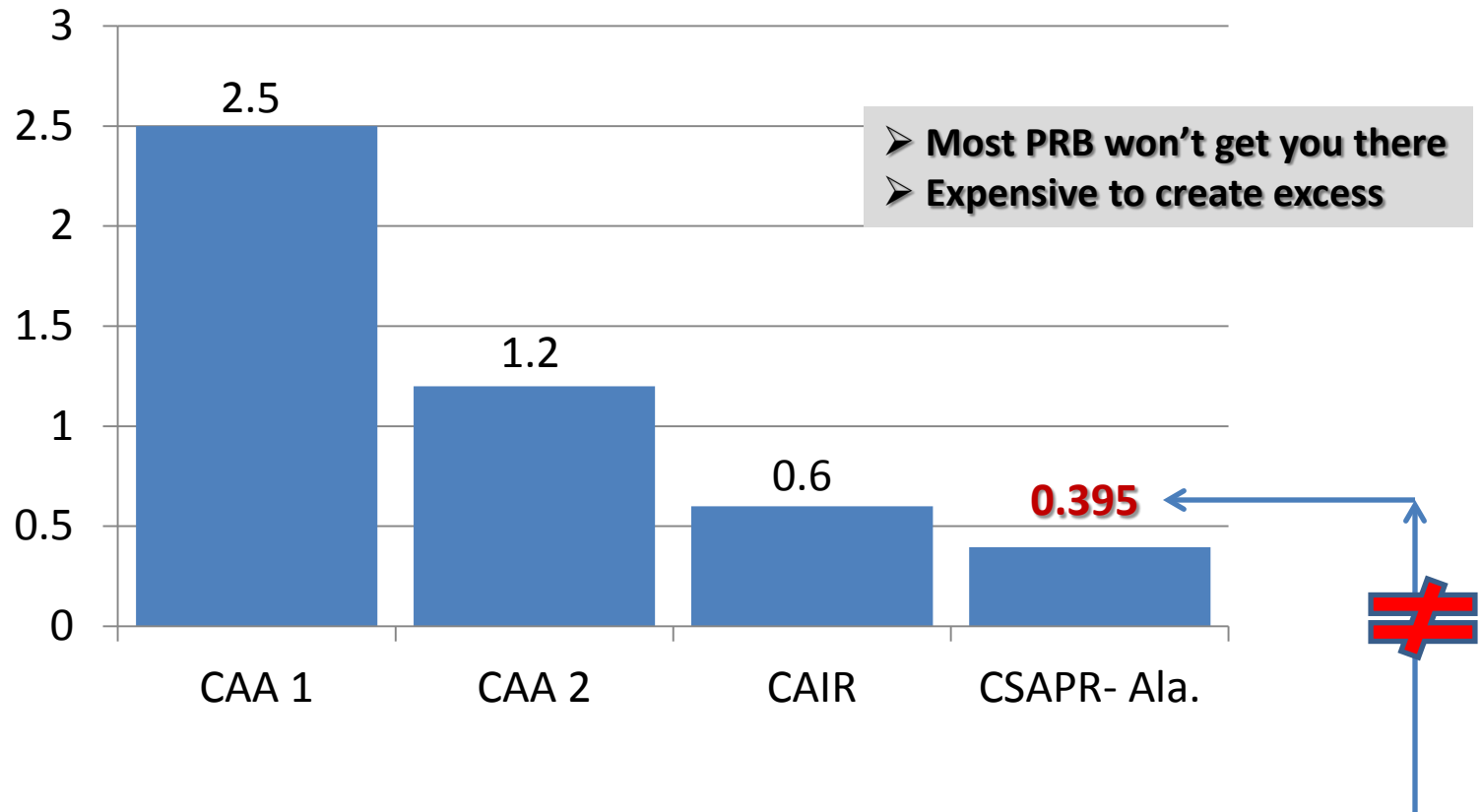
---

***y in terms of  
cCarthy  
nd Radiation***



# Or ....Is this really just a Return to Command and Control of the 1980's ?

"effective" SO2 Rate



Platt's PRB OTC broker index – 8,800 btu, .35%S = **0.8lbs SO2/mmbtu**

# CSAPR

## Where are we from a Legislative / Legal perspective?

---

Sen. Paul – Congress. Review Act - FAILED 56 to 41



Sen. Alexander – S 1851 – CSAPR 2013 & Codify - sent to EWP



Coats / Manchin Proposal – harmonize CSAPR & MACT implementation



Carper – “I think that time has come and probably gone” Carper said of a possible legislative fix for the SO<sub>2</sub> and NO<sub>x</sub> markets. EF online



A CSAPR/MACT “*delay rider*” appended to an appropriations bill



---

### STAY of the Rule:

Latham & Watkins > 50%

Hunton & Williams < 50%

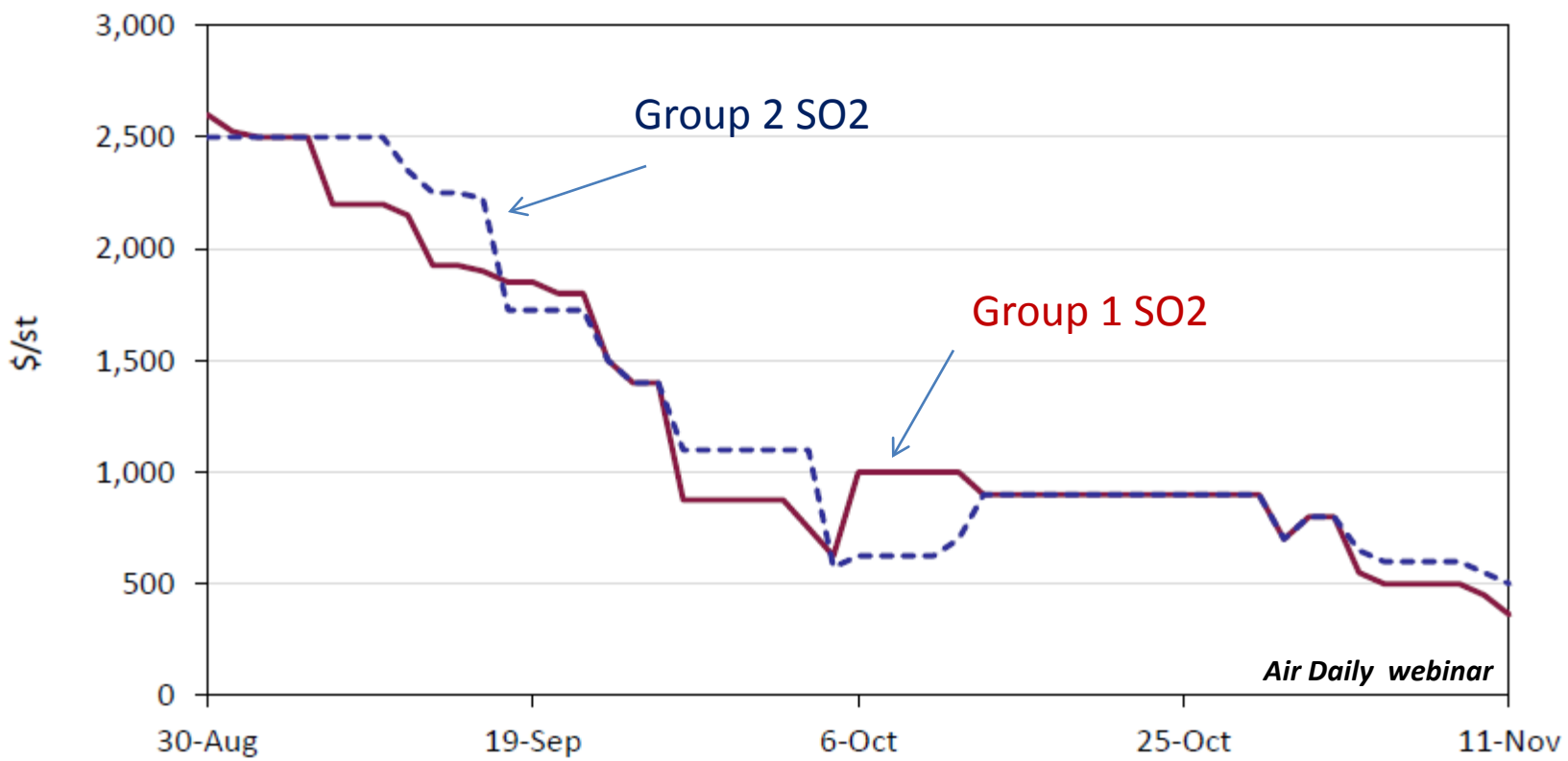
EPA < 20%

December 12<sup>th</sup> thru 20<sup>th</sup> ?

**Will a fully functioning CASPAR trading market develop?**



# Illustration of CSAPR SO2 Markets to date .....



*Air Daily webinar*

Aug. 31 thru  
Nov 11<sup>th</sup>

<b>Group 1 – 10,350</b>	<b>Seasonal NOx – 4,200</b>
<b>Group 2 - 1,100</b>	<b>Annual NOx - 300</b>

# My “forecast” for the near term .....

**Price Volatility**



**Market Depth**



**Mkt. Confidence**



**Participants**



**Mike McKenna .... a long time friend & DC lobbyist**



## Politico - NEW EPA REGULATION IN THE FIRING LINE:

- WH says it is on track to release the final version of the utility MACT that would limit mercury, acid gases and other pollutants from electric utilities.
- Industry officials were given the cold shoulder at a meeting earlier this week with EPA Administrator Lisa Jackson, FERC chief Jon Wellinghoff and others.
- **"There was no indication that they're going to slow the train down," said Mike McKenna, a GOP energy strategist with knowledge of the meetings. "The administration officials "were cordial but that was about it."**
- Concerns from the industry - aside from the \$10.9 billion annual price tag - include increased electricity costs and decreased grid reliability.

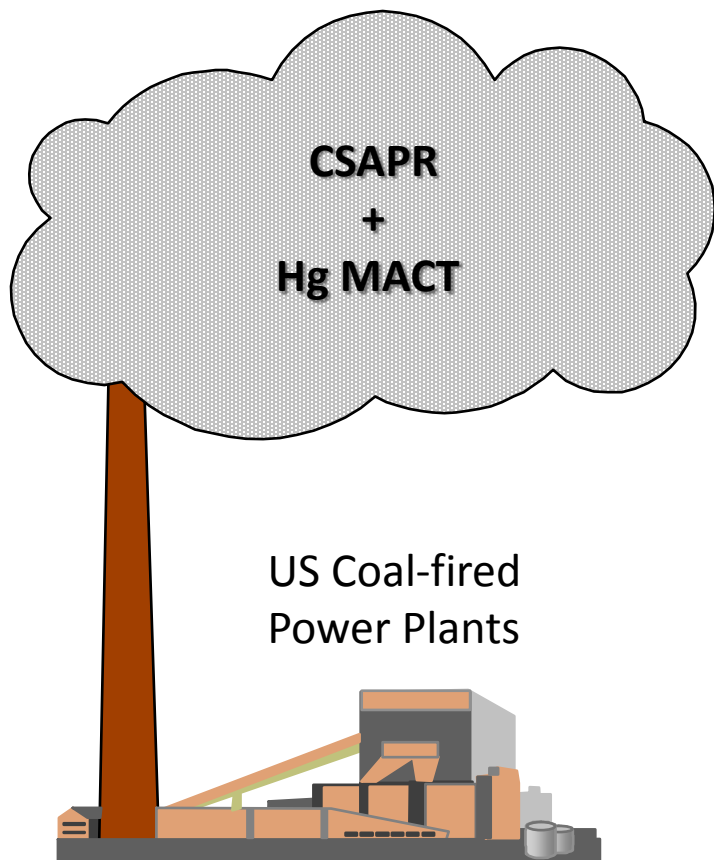


# Like NSR settlements ???

## 60 to 100 Consent Decrees on MACT ?

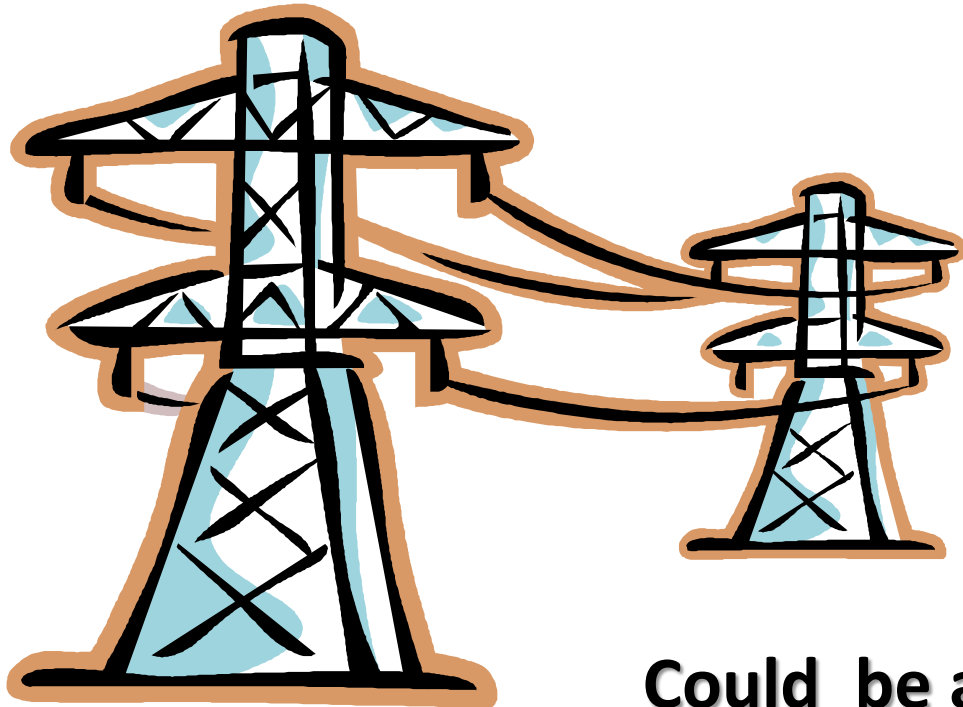
Right now, the Administration is in discussions with utilities in which they are attempting to arrive at a set of agreements leading to a series of consent decrees with individual companies. There are a few obstacles to such an approach. Few companies are anxious to allow EPA into their system, which is the certain result of a system-wide consent decree enforced by an agreed-upon compliance plan. Moreover, it is not at all clear that such consent decrees could be the products of discussions between just the agency and a utility. Given the nature of the pending litigation, it is probable that consent decrees related to the utility MACT would go before a judge, who would allow intervenors (think environmental groups) to comment on (and possibly move to alter) the decrees. Finally, the scope and number of the decrees (60? 100?) would almost certainly overwhelm the ability of the agency and its lawyers at the Department of Justice to process them in a timely manner.

Congressional Research Service – Aug. 8, 2011  
***“EPA Train Wreck”***

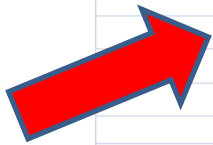


**40 to 70 GW of Coal Retired – 2015**  
**> 115 million tons US Steam Coal**

## Implications for Power Prices .....



Could be as much as  
+\$10/MWH on PJM Power Prices  
(un-scrubbed older coal units)



**January 1, 2012**

**CSAPR**

Btu/lb  
Sulfur content, %  
NOx rate, lb/MMBtu  
Hg rate, lb/TBtu  
CO<sub>2</sub> rate, lb/MMBtu  
Heat rate, Btu/Kwh

**no controls**

**SCR**

**CA Coal**

**Comb Cycle - NG**

12,000	NA
1.00%	NA
0.350	0.018
9	NA
205.3	117.08
9,500	7,000

**Base Costs**

**Bituminous Coal**  
(\$/ton)

**Natural Gas**  
(\$/MMBtu)

Fob Railcar / Henry Hub  
Transportation +VOM+FH  
TOTAL

\$ 80.00	\$ 4.78
\$ 10.00	\$ 0.32
\$ 90.00	\$ 5.10

**\$/MMBtu - delivered**

\$ 3.75	\$ 5.10
---------	---------

includes added cost of FDG

**\$/MWH + \$1/MWH - VOM & "DeRate" \$ 36.63 \$ 35.70**

**Environmental Penalty Adders:**

Title IV

*emission market prices \$/ton*

(\$/ton)

(\$/MMBtu)

SO <sub>2</sub> , \$/ton SO <sub>2</sub> - Title IV	\$ 2.50	\$ 0.05	na
NOx, \$/ton Nox - CAIR - A	\$ -	\$ -	\$ -
NOx, \$/ton Nox - CAIR - S	\$ -	\$ -	\$ -

CSAPR

actual trade

SO <sub>2</sub> , \$/ton SO <sub>2</sub> - Grp #1	\$ 2,500.00	\$ 47.50	na
SO <sub>2</sub> , \$/ton SO <sub>2</sub> - Grp #2	\$ -	\$ -	na
EPA est NOx, \$/ton Nox - CAIR - A	\$ 550.00	\$ 2.31	\$ 0.00
EPA est NOx, \$/ton Nox - CAIR - S	\$ 1,430.00	\$ 6.01	\$ 0.01

CO <sub>2</sub> , \$/ton CO <sub>2</sub>	\$ -	\$ -	\$ -
--	------	------	------

**Totals**

\$ 55.86	\$ 0.02
----------	---------

**\$/MMBtu - Enviro Adders**

\$ 2.33	\$ 0.02
---------	---------

**Total \$/MWH Enviro Adders**

\$ 22.11	\$ 0.12
----------	---------

**Fuel + Enviro Adders \$/MMBtu**

\$ 6.08	\$ 5.12
---------	---------

**Total \$/MWH for Dispatch**

\$ 57.74	\$ 35.82
----------	----------



# Coal Ash implications .....



## Forecast:

**#1 - Wet Impoundments  
Phased out over  
10 years**

**#2 Coal Ash will NOT be  
classed as a  
*“Hazardous Waste”***

**1999 – recommendation – it is NOT a hazardous waste  
And then came 2008 and the TVA disaster  
Potential for 400+ coal units to shut down?**

# Cooling Water Intake Structures .....



## Forecast:

A “finessed” solution....

Impingement standard  
may be met through a  
variety of mechanisms

- **CWA Sec. 316(b) Best Tech Available**
- **Mandate – Closed-Cycle Cooling?**
- **Back to old EPA “one size fits all” - July 2012**

# Massive Uncertainty / No Direction / Frustration



**Export Met.  
Coal**