



RAP

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Advice to States Considering Greenhouse Gas Rules for Existing Generation

West Virginia Law School

Presented by Richard Sedano

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The Regulatory Assistance Project

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Introducing RAP and Rich

- **RAP is a non-profit organization providing technical and educational assistance to government officials on energy and environmental issues. RAP staff have extensive utility regulatory experience.**
 - **Richard Sedano directs RAP's US Program. He was commissioner of the Vermont Department of Public Service from 1991-2001 and is an engineer.**

RAP Activities on Greenhouse Gas

- **Advisor to Regional Greenhouse Gas Initiative during its formation**
- **Researcher on connections between energy and environment and power sector implications**
- **Advisor and Convener of state officials anticipating EPA regulations**
- **(unpaid) Advisor to US EPA when they ask**

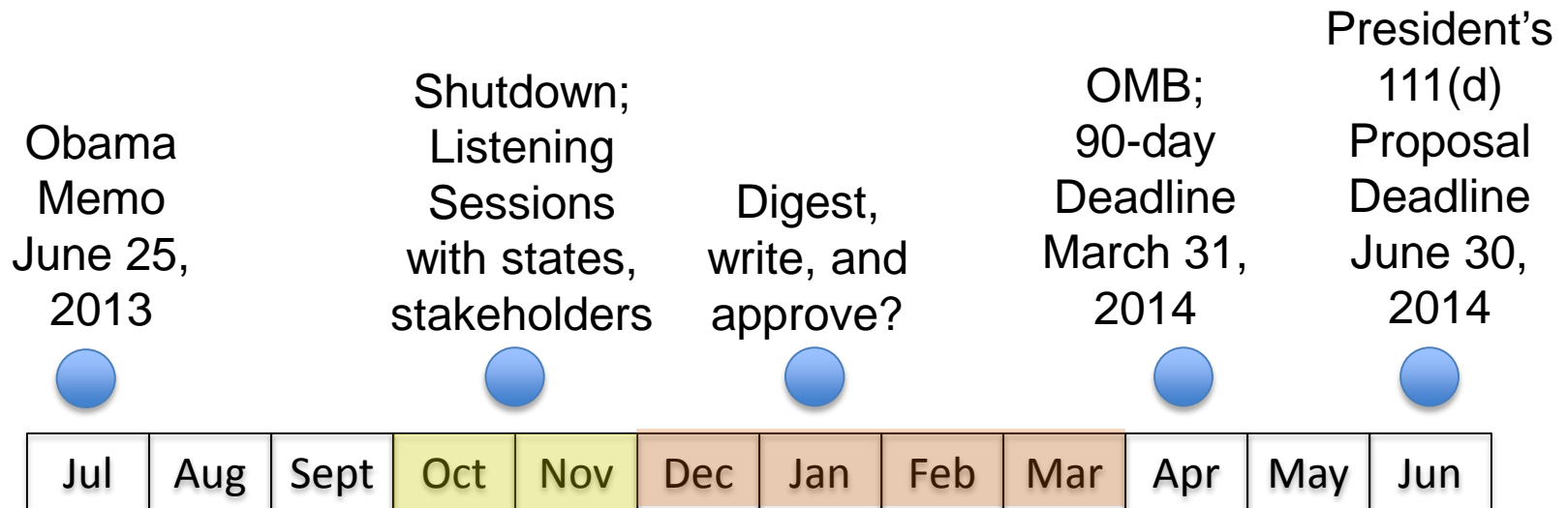
Clean Air Act §111(d) Expectations

- New terrain for EPA ...
 - On a tight schedule...
 - With greater-than-usual political and legal risks...
- *Whatever the level of compliance is,*
 - *Do expect much work, discretion to come back to the states*

Most Likely Outcome?

- ??
 - Sargent & Lundy (on-site reduction) plus?
- **Expectation: EE will “count”**
 - (i.e., “system”, outside the fence)
- **What else? (Form? Baseline?)**
 - It depends...

Tight Timeline for Proposal



Clean Air Act §111(d)

CAA §111(d) = GHG reductions from existing power plants

EE = Key to 111(d) enviro, economic, political effectiveness

EE hinges on “State Equivalency Plans” (like SIPs)

State Equivalency Plans hinge on *Quantifying EE*

Quantifying EE hinges on *EE/RE Roadmap*

EE/RE Roadmap hinges on:

EMV &
Data

Measures
→ Emissions

EPA Regional
Offices

Success
Stories

Consider EPA's "4 Questions"

1. What state/stakeholder experience reducing power sector CO₂?
2. How should EPA set the standard?
 - (“Best system of emission reduction”)
3. What flexibility, criteria for state plans?
4. What can EPA do to help with plans?

What Should States Do Now? (1)

- Get your “ducks in a row”
- Get a handle on your state’s:
 - Current situation
 - Preferred direction
- ***Develop credible, transparent processes – with broad stakeholder participation and solid evidence/data – that can form your foundation for defensible GHG reduction claims that achieve standards while minimizing costs, other challenges***

What Should States Do Now? (2)

- What EE, RE, CHP, EGU or other supply-side reductions are in place? What review processes?
 - Have measured energy savings (and how – SEEAAction? DOE Uniform Methods? EM&V Forum?)
 - How EMV'd, reviewed, and translated into emission reductions?
 - Determined where located?
 - How can PJM attribute tracking system help?
 - What does EPA/DOE-EIA already have in its baseline projections?

What Should States Do Now? (3)

- Apply lessons from existing air programs
- Are PUC, DEP, and SEO talking with each other? Planning together?
- Dialogue with EPA Regional Office?
- Pursuing “SIP-quality” credit using EPA’s [EE/RE Roadmap](#)?
- Join EPA’s “[Ozone Advance](#)” and/or “PM Advance” program(s)?
 - Inventory, identify EE/RE measures, etc.
 - Compliance convergence with other EPA rules

What Should States Do Now? (4)

- Some good examples of planning ahead:
 - **Colorado** PUC, DPHE, and Xcel planning for *Clean Air-Clean Jobs* requirements
 - **Maryland** estimating EE/RE impacts on:
 - Ambient air quality / nonattainment
 - State economy / jobs
 - **Kentucky** as you heard from John Lyons
 - Many other states doing similar work, including regional conversations

What Should States Do Now? (5)

- *In Short: Get ahead of the curve*
 - Earnest first-movers likely to be rewarded
 - Will better understand §111(d) problems & challenges
 - Will have “no-regrets” when it comes to state **equivalency** demonstrations

What Should States Do Now? (6)

- Don't stop there: Make your wishes known!
 - Regional coordination with other states
 - EPA will seek input via comments to draft rule; tell them what you need
 - What outcomes? What tools? What help?
- Some detailed “asks” of EPA:
 - Line up Regional Offices
 - Anticipate and address foreseeable circumstances (e.g., regional compliance pools)
 - Full use of their emission [calculator](#) AVERT
 - Approve *EE/RE Roadmap* submittals
 - “Mobile source analogy” for EE
 - “Scale-it-up” tools
 - Multi-pollutant compliant paths (i.e. cross state rule)

Measuring EE Emissions Reductions: RAP's "Mobile Source Analogy"



“Scale-It-Up”: Look-Up Tables for EE/AQ Data

Units Needed to Avoid 1 Ton-per-Year Emissions			
Measure	NOx	SO2	CO2
LED Light – New Construction	3,734	2,555	5.4
Mobile Home Duct Sealing	712	475	1.0
SEER 16 Air Conditioner with Electronically Commutated Motor	5,216	3,130	8.6
EnergyStar Clothes Washer with electrically heated water	29,333	11,000	22

*Sources: Northwest Regional Technical Forum; Wisconsin Focus on Energy
NEEP Regional Energy Efficiency Database, etc.*

Affirmative Compliance Opportunities

- EE/RE in the mix
- Regional systems of compliance will count
 - And can have spillover benefits (*cap and invest*)
- Go beyond EERS/RPS, or else “backsliding”
 - RSVPE = Real, surplus, verifiable, permanent, and enforceable
- Eventual review of the standard (8 years?)
- Remember the real target now:
 - Not June 2014 Proposal, but 2015 Final Rule & 2016 state plans

Conclusions: Flexibility

- ***111(d) is likely to fall largely to the states***
- Get ready; get going; talk to EPA, others
- But given prevailing uncertainties, stay “light on your feet”
 - Peter Drucker: *The quality of a decision is how quickly and easily it can be reversed*
- Life certainties: *Death, Taxes, and Litigation over EPA regulations*

Linked RAP Resources

- [Further Preparing for EPA Regulations](#)
- [Quantifying the Air Quality Impacts of Energy Efficiency](#)
- [State Implementation Plans: A Primer](#)
- [Preparing for EPA Regulations](#)
- Public Utilities Fortnightly 2014 Feb
 - [Complying with 111\(d\)](#)
- [Tracking Emissions Associated with Energy Serving Load in RGGI](#)

About RAP

The Regulatory Assistance Project (RAP) is a global, non-profit team of experts that focuses on the long-term economic and environmental sustainability of the power and natural gas sectors. RAP has deep expertise in regulatory and market policies that:

- Promote economic efficiency
- Protect the environment
- Ensure system reliability
- Allocate system benefits fairly among all consumers

Learn more about RAP at www.raonline.org

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