EPA’s Clean Power Plan (CPP): Pathways, Options, and Opportunities

National Association of State Energy Officials
CPP Workshop: Least Cost Compliance Options and Challenges
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Presented by Ken Colburn, Principal
Introduction

• The Regulatory Assistance Project (RAP) is a global, non-profit team of energy experts, mostly veteran regulators, advising current regulators on the long-term economic and environmental sustainability of the power and natural gas sectors. (www.raponline.org)
  – Foundation-funded; some contracts
  – Non-advocacy; no interventions

• Ken Colburn is a Principal at RAP. His experience as an air quality regulator came as Air Director for the State of New Hampshire and as Executive Director of NESCAUM.
EPA’s Final CPP vs. Proposed: Masterful (1)

• Far greater legal defensibility
  – EE building block gone; actions “by” (vs. “at”) EGUs
  – Uniform emission rates applied nationally

• More achievable compliance timeframe
  – Starts in 2022 vs. 2020
  – Far more rational 3-phase “glide path”

• Much easier implementation
  – “Inside the fence” ~halved; more reasonable gas redispatch; under-construction nukes count, etc.

• Reliability safety valve
EPA’s Final CPP vs. Proposed: Masterful (2)

• “Trading Ready”
  – Eliminates need for multi-state agreements
  – (May still be multi-state issues, however, e.g., in RTOs)

• Clean Energy Incentive Program (CEIP)
  – Responds to low-income concerns

• Longer window for states to plan
  – Initial submittal due Sept. 2016; final plan Sept. 2018

• EPA provides guidance via proposed federal plan, model trading rules, CEIP, and EMV guidance
States Get First Crack at Compliance Plans... but have little guidance (except draft Federal Rule)

Can you give us some guidance?

What do we need to do?

Do what works best for you!

Could we see some innovation?

...but have little guidance (except draft Federal Rule)
Masterful, But Not Without Some Problems

• Overall slightly less stringent (mass)
  – 32% reduction from 2005, off higher baseline
  – Several states may already comply

• EE may find it harder to play (especially mass-based)
  – EE won’t “happen automatically”
  – EM&V remains unnecessarily complex
    • CEMs; RAP’s “Mobile Source Analogy”
      www.raponline.org/document/download/id/7501
Fear: It’s quite possible that air regulators will lean toward the better delineated paths.
EE = Least-Cost Approach
(Levelized Cost of Energy ($/MWh), Lazard, Version 8, 2014)

If EE/RE isn’t prominent in your state’s CPP plan, your state doesn’t have a least-cost plan.
Multi-Pollutant Reductions + Water Savings

- Good CPP choices can help air quality; good air quality choices can help CPP compliance
- Ditto for increasing water concerns
- Integrated multi-pollutant, multi-media approach can lower cost, risk (see RAP’s IMPEAQ paper)

www.raponline.org/document/download/id/6440

~10% lower
What About Privately-Delivered EE (ESCOs)?

- Doesn’t rely on state or utility investment
- Projected to grow to $10-15 billion by 2020
  - Scalable for CPP
- Not clear how to include in state CPP plans
- Ditto for straight-up industrial EE efforts
- Ditto for state policies
- Trading: Need for an EE Registry?

Source: Bloomberg New Energy Finance, “Sustainable Energy in America Factbook”
Need Detailed “How-to” Ways to Include EE in Mass-Based: Follow the Money

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Deep Thoughts (1)

• “Skate where the puck is going to be” (Gretsky)

• CPP isn’t the last environmental regulation
  – New ozone NAAQS October 1st; SO2, CSAPR, PM, haze coming up; water concerns

• EGUs are just the first to be regulated
  – Next up: Refineries? Cement?
  – Mass-based allows economy-wide trading

• Massive change underway in power sector
  – Tom Siebel’s vision: “The Internet of Energy”
Deep Thoughts (2)

- Emission allowances have value
- Civic society trades pollution (health and welfare harms) in exchange for public goods
- How will that value be recognized, captured, distributed, and verified in your state plan?
  - Choice is up to each state
  - Different states will make different choices
  - Your job: Inform the decision makers
Thank You for Your Time and Attention

About RAP

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

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

Learn more about RAP at www.raponline.org

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