

Carbon Pricing Senior Task Force (CPSTF) Polling Results

Carbon Pricing Senior Task Force August 21, 2020

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CPSTF Poll Participants

A total of 182 stakeholders

Voting Member: 46

- Affiliates: 129

Non-Members: 7



- What is your preferred path forward?
 - Continue to focus on education and analysis and do not start Stage 2 development of market rules until certain criteria are met.
 - Continue education and analysis and start Stage 2 development of market rules.
 - Wrap up education and analysis and start Stage 2 development of market rules.
 - Sunset the CPSTF until certain criteria are met.



Overall Results - Path Forward

	Total	
	Participants	%
Continue to focus on education and analysis and do not start Stage 2 development of market rules until certain criteria are met.	64	35%
Continue education and analysis and start Stage 2 development of market rules.	49	27%
Wrap up education and analysis and start Stage 2 development of market rules.	15	8%
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Sunset the CPSTF until certain criteria are met.	54	30%



- 65% of the responses suggest not moving forward to rule development
- 62% of the responses suggest continuing education and analysis
- 35% suggested moving to rule development



RGGI Education

Emissions

Leakage Mitigation

States & Jurisdiction

Alternative Carbon Policies



Q2: Suggested Additional Education

RGGI Education

Additional education on RGGI

Emissions

• Education on emissions increases seen in PJM analysis and how we can counteract these increase

Leakage Mitigation

- Education on other types of leakage, such as resource shuffling
- Environmental and economic impacts of border adjustments
- Alternatives to one-way/two-way border adjustments
- Disbursement of funds as a result of implementing a border adjustment

States & Jurisdiction

- The intersection of carbon pricing and state environmental policy goals (impact on RPS goals)
- Legal or jurisdictional implications from market design changes and applying border adjustments

Alternative Carbon Policies

- Enhanced or expanded REC/ZEC market structure
- Enhanced or expanded RGGI market
- PJM-wide Forward Clean Energy market
- States taxing generation emissions rather than incorporating it into PJM's dispatch



Q2: Suggested Additional Analysis Already Provided

Topic	Link to Analysis/Results
Model if IL joins RGGI	Modeled the carbon-price region with DE, MD, NJ, VA, PA, IL (8.21.20)
Variations of one-way border adjustment method (states in/out, prices)	Modeled one-way border adjustment with various states in/out of the carbon-price region and at various carbon prices. (Scenario Summary)
Model and analyze energy and emissions leakage across the seams	Provided information about changes to external interchange in each scenario. Not able to provide impacts of leakage on external regions.
Model a RTO wide carbon price at a higher price, such as Social Cost of Carbon levels	Modeled an RTO-wide carbon price at \$6.87/ton, \$14.88/ton, \$25/ton, and \$50/ton. (<u>5.19.20</u>)
Model price at Social Cost of Carbon (\$48/ton) similar to NYISO's proposal	Modeled RTO-wide and carbon-price region consisting of DE, MD, NJ, VA, PA at a carbon price of \$50/ton. (5.19.20)
Model sub-regional border adjustments that account for actual transmission flows	Transmission flows are accounted for in the model.
Model and monitor transmission constraints to get a better understanding of localized impacts	Transmission constraints are included in the set up of the model and monitored.



Q2: Suggested Additional Analysis Not Yet Provided

Topic	Status
Model changes over time from the effect of carbon price at different price points	Additional modeling required. Current modeling does not include capacity expansion capabilities.
Model impacts of a carbon price over a 15 year period using the state legislation to drive the model's resource mix	Additional modeling required. Current modeling does not include capacity expansion capabilities.
Model impacts of a carbon price of one year with high penetration of renewables	Additional modeling required. Current modeling does not include capacity expansion capabilities.
Realistic caps with Dynamic price allowances	Current modeling capability does not include the ability to model emissions trading schemes. Carbon prices are implemented as carbon taxes.
Dynamic generation fleet	Additional modeling required. Current modeling does not include capacity expansion capabilities.
Leakage mitigation mechanism other than one-way or two-way border adjustment	Please provide suggestions for consideration.

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Q3: Suggested Criteria Before Rule Development

State Driven

Federal Regulation

Evidence and Consensus on Leakage Mitigation

Additional Time

Considerations of Market Mechanisms



Q3: Suggested Criteria Before Rule Development

State Driven

- One or more states request assistance from PJM on leakage mitigation
- · Majority of states within PJM favor a carbon price
- Majority of states within PJM take part in a CO2 market

Federal Regulation

- Federal requirement to price carbon
- Legislation requires PJM to consider/implement a carbon price

Leakage Mitigation

- Border adjustments are proven to be effective to mitigate emissions leakage or consider an alternative method
- Majority stakeholder support for border adjustments
- Assess energy and emissions changes at seams and determine effective mitigation approach

Additional Time

- More time to analyze results from PJM analysis
- Wait for outcomes of the FERC Technical Conference

Market Considerations

- Practical considerations of how the market would look and work
- Comparison of alternative carbon policies



Q4: Suggested Priorities for Rule Development Themes

Market Framework

Impacts

Leakage Mitigation

States

Settlements

Federal Policy

Downstream Impacts



Q4: Suggested Priorities for Rule Development (high)

Market Framework

- Develop a consistent and flexible framework for participation by states
- Ensure appropriate price signals that incorporate the cost of carbon
- Multi-state carbon-pricing regions
- RTO-wide carbon price

Impacts

- Reducing/eliminating impacts to non carbon-pricing participants
- Identify impacts of leakage mitigation
- Impacts on FTRs, ARRs, UTCs
- Impacts on fast-start pricing
- Environmental impacts, specifically CO2

Leakage Mitigation

- Mechanisms for leakage mitigation between RGGI and non-RGGI states
- Criteria for when to implement a border adjust and what type
- Nodal modeling with one-way border adjustment
- Consider emissions at the source as opposed to at the border



Q4: Suggested Priorities for Rule Development (other)

States

 Facilitating state interest without creating a market settlement issue

Settlements

 Market rules to determine energy and economic flows and the resulting financial settlements between generation and load

Federal Policy

Implement a transition mechanism in the case federal policy is enacted

Downstream Impacts

Ratepayer impacts





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