

# Carbon Pricing Senior Task Force - Status

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**CPSTF** 

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- Established in July 2019
  - Problem Statement & Issue Charge by several stakeholders
- Issue Charge Main Objective:
  - Explore impacts of emissions and price leakage between regions with and without carbon pricing policies (e.g. RGGI), and develop rules to manage leakage where appropriate.
- Two stages:
  - Stage 1 Education & Analysis
  - Stage 2 Rule Development
- Conducted polling in summer 2020 to solicit stakeholder interest in moving from Stage 1 to Stage 2.
  - 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
- A full history of the education & analysis can be seen through the meetings on the CPSTF page under Task Forces on pjm.com



# **CPSTF Key Work Activities Summary**

Issue Charge: https://pim.com/-/media/committees-groups/task-forces/cpstf/20190726/20190726-item-02b-issue-charge.ashx

Carbon pricing & companion policies in PJM region today

Jurisdictional considerations for establishing a carbon price

Jurisdictional considerations for leakage mitigation

Analysis of leakage impacts & mitigation options

Takeaways from other ISO/RTOs

Stage 1

Scope of legal / regulatory design considerations for addressing carbon pricing & leakage mitigation

Scope of technical design considerations for addressing carbon pricing & leakage mitigation

Stage 2

Develop a Common Set of Rules to Implement Carbon Pricing & Manage Leakage Where Appropriate



- Education was provided by PJM and others in the industry on:
  - Carbon pricing concepts
    - Carbon tax vs. carbon cap & trade programs
    - Carbon pricing in PJM today via the Regional Greenhouse Gas Initiative (RGGI)
    - Introduction to leakage
  - Roles of companion policies
    - Review RPS standards and goals around the PJM region
    - Federal Clean Energy Standard legislation (as proposed)
  - Carbon pricing and leakage mitigation efforts in other ISO/RTOs
  - State and Federal jurisdictional considerations



- PJM presented its study on carbon pricing a range of carbon prices and potential leakage mitigation approaches
- Stakeholder analyses on other carbon pricing and leakage mitigation approaches MJB&A/EDF, Monitoring Analytics, Exelon, Vistra, and E3/EPSA
- Comparison of carbon pricing and leakage mitigation studies was presented at the February 2021 CPSTF



## Takeaways from Education & Analysis

#### Education

- Carbon pricing exists in PJM today through RGGI
- Leakage occurs in PJM because of disparate state policy, regulation, resources and economics
- PJM states have different views on pricing carbon, leakage, addressing impacts from neighboring state policies
- There are open legal and regulatory questions regarding:
  - Decision on if a carbon price in PJM will continue to come solely from the RGGI program
  - Decision to mitigate leakage

### **Analysis**

- Carbon pricing is an effective tool to achieve cost-efficient emissions reductions
- There are many approaches to leakage mitigation:
  - 1. Applying carbon pricing regionally
  - Regional carbon pricing as leakage mitigation for subregional carbon pricing (ex. Vistra's proposal)
  - Border adjustment constraints within wholesale electricity markets (one-way or two-way)
  - Adjusting state RGGI allowance caps based on emissions of imports
  - RGGI allowance allocation & revenue investment to provide incentives for in-state generation & energy efficiency
- Impact of leakage mitigation varies based on:
  - The mechanism utilized
  - Resources in carbon price sub-region
  - Amount of net imports or exports from the carbon price subregion

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## Suggestion to Sunset the CPSTF

- PJM and stakeholders have completed extensive education and analysis on various CPSTF topics
- There was strong feedback from the <u>survey results</u> to not move forward with Phase 2 – Rule Development on leakage mitigation
- Prioritization of current initiatives for PJM and the stakeholders
  - There are current efforts in the interconnection process, transmission policy (Workshops and the FERC ANOPR) and the capacity market phase 2 reforms that will include discussion related to decarbonization and procurement of clean resource attributes.
- The decision to sunset the CPSTF is ultimately a stakeholders decision.
   PJM's proposed plan for your consideration is to ask for a vote at the MRC in the Oct/Nov timeframe to sunset the CPSTF.





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# Appendix

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### Links to Studies and Analysis

### Presented at CPSTF:

- PJM: <u>Study of Carbon Pricing & Leakage Mitigation Mechanisms</u>
- MJB&A / EDF: <u>Carbon Pricing Modeling</u>
- Monitoring Analytics: <u>Carbon Pricing in PJM</u>
- Exelon: <u>Using Energy Markets to Enhance RGGI, RTO Leakage Mitigation for Carbon Reduction</u>, <u>Alternative Border Adjustment Methodology</u>
- Vistra Energy: Regional Carbon Pricing as Leakage Mitigation for Subregional Carbon Pricing
- E3 / EPSA: <u>Least Cost Carbon Reduction Policies in PJM</u>

#### Additional:

- ICF / VA DEQ: <u>Virginia Greenhouse Gas Rule</u>
- ICF / PA DEP: Pennsylvania RGGI Modeling Report
- Resources for the Future (RFF):
  - State Policy Options to Price Carbon from Electricity
  - Options for Issuing Emissions Allowances in a Pennsylvania Carbon Pricing Policy

<sup>\*</sup> This is not intended to be a complete list of studies on this topic. Each study included in the comparison focuses on the PJM region.