LBMP Carbon Impact ($LBMP_c$)

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Agenda

- Presentation Objective
- Background
- LBMP Carbon Impact ($LBMP_C$)
- External Interfaces

Presentation Objective

- **Provide an overview of the process to determine the LBMP carbon impact ($LBMP_C$), which:**
  - Will be calculated for use in the import/ export charges/ credits at each interface.
  - Will be calculated for use in the carbon residual allocation.
- **Further describe how the NYISO envisions providing transparency under carbon pricing.**

Background

Background

- **The NYISO straw proposal envisions including carbon pricing within the wholesale energy market using the existing offer structure.**
  - The NYISO market software will not automatically calculate a carbon component of LBMP, since the carbon charge will be included with fuel and other relevant costs when bid into the current structure.
  - Instead, the NYISO envisions calculating an after-the-fact estimate of the LBMP carbon impact.

Background

- **The estimated LBMP carbon impact will allow the NYISO to:**
  - Achieve the NYISO's proposed cost levelizing allocation of the carbon charge residuals to LSEs.
    - The Proportional Allocation would also require the LBMP carbon impact, while the Load Ratio Share Allocation would not require the LBMP carbon impact.
  - Enable the NYISO to estimate LBMP carbon impact at external interfaces
  - Provide carbon pricing transparency

LBMP Carbon Impact ($LBMP_C$)

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Calculation of the LBMP Carbon Impact

- **The NYISO intends to develop a calculation to estimate the LBMP carbon impact.**
  - The NYISO will be unable to capture the exact LBMP carbon impact, due to a number of complications, including:
    - Difficulty in identifying the marginal unit(s) due to product trade-offs (Energy, spin, regulation), and time interval trade-offs involved in the NYISO's look-ahead when considering the next MW of supply.
    - Uncertainty of marginal units' precise emissions rates
      - For example, the exact mix of fuels would need to be known for units using a blended fuel
- **Identified marginal units and their likely emissions would be used to estimate the LBMP carbon impact.**
  - The NYISO is currently examining different methodologies to calculate this estimate.
- **Details of the calculation, including detailed examples, will be discussed within the NYISO's stakeholder process (MIWG).**

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Posting the Carbon Impact on LBMP

- The NYISO will report the estimated LBMP carbon impact for all 11 Load Zones, as well as for each external interface Proxy Bus.
- The NYISO is considering whether the estimated LBMP carbon impact could be calculated and posted at a time granularity consistent with today's LBMPs or if a different frequency would be more appropriate.

External Interfaces

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Forecasting the Proxy Bus LBMP Carbon Impact

- **The NYISO would forecast Proxy Bus LBMP carbon impact for each external interface and time interval.**
  - The NYISO proposes to investigate various approaches to determine a forecast methodology and appropriate frequency.

Straw Proposal - Carbon Pricing Treatment of Interchange Transactions

- **Import/export transactions will compete on a status quo basis (option 1).**
  - Importers would be paid the full Proxy Bus LBMP and charged the estimated Proxy Bus LBMP carbon impact.
  - Exporters would be charged the full Proxy Bus LBMP and paid the estimated Proxy Bus LBMP carbon impact.

Straw Proposal - Carbon Pricing Impact to Proxy Bus LBMPs

- **The applicable import and export charge and credit at each external interface would be available to Market Participants scheduling interchange transactions before DA and RT offer submission deadlines.**
  - The same carbon impact would apply to both imports and exports at the same external interface over the same time interval.

Questions?

We are here to help. Let us know if we can add anything.

Feedback?

- Questions and/or comments can be sent to IPP_feedback@nyiso.com

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