Work Streams Greenhouse Gas Coordination Working Group

Work Stream #1: ISO Market Operations & GHG Design – Current Approach to GHG Pricing Programs in WEIM

Market participants and stakeholders do not have enough information to evaluate whether the WEIM design works as intended.

<u>Problem Statement 1)</u> The optimization does not take the explicit cost of secondary dispatch into account, and therefore may not balance optimized attribution with constraints to limit secondary dispatch.

<u>Problem Statement 2)</u> The current GHG design does not limit attribution to only capacity above the baseline which results in the potential for secondary dispatch.

<u>Problem Statement 3)</u> Attribution is not scale-able because it creates the potential for secondary dispatch. This secondary dispatch could increase with market expansion.

<u>Problem Statement 4)</u> The current price formation does not provide full transparency into the total marginal GHG cost, leading to inaccurate price signals and reduced price transparency.

<u>Problem Statement 6e</u>) Backfilled dispatch is defined as potentially higher-emitting resources backfilling to serve load in non-GHG areas because clean resources that would otherwise be serving those areas are instead attributed to GHG areas. There is no current metric that accurately assesses whether the ISO's GHG attribution process leads to resource backfilling and/or secondary dispatch. Using base schedules to estimate backfilled and/or secondary dispatch may be inaccurate and misleading, because resources' base schedules are not optimized and are not reflective of optimized transfers between non-GHG areas. As a result, stakeholders are unable to assess the relative benefit of reducing secondary dispatch via the optimized counterfactual compared to using base schedules as the baseline.

<u>Problem Statement 6d)</u> There is a lack of transparency into the emissions intensity of the marginal resource. Publication of a marginal emissions rate for the GHG area and EDAM footprint may provide insight on the cost of emitting resources, which can be used to help shape how organizations bid resources into the market.

<u>Problem statement 6f)</u> There is currently not a metric to quantify the financial and emissions impacts of the ISO's GHG design.

Work Stream #2: Addressing Non-Pricing and Clean Energy Policies, and Voluntary Goals

The current WEIM and proposed EDAM GHG designs only address GHG pricing programs and do not facilitate the needs of other types of GHG or clean energy state policies or voluntary utility or customer GHG or clean energy goals.

<u>Problem Statement 5)</u> When there are multiple unlinked GHG regulation areas or different reporting requirements by different states, market participation may result in double counting, undercounting, or inconsistent counting of emissions. Variations of this issue include:

- b. Using both total WEIM attribution and systems to allocate generation and associated emissions to retail load (i.e., RECs)
- c. Between unlinked jurisdictions if one area uses generation based accounting and another area uses load based accounting

<u>Problem Statement 6b)</u> There is no requirement that the generation/tag data reported to WREGIS and the data arising from the ISO's GHG attribution be consistent with each other. This leads to the potential for double-counting of the same MWh of energy when jurisdictions deem GHG attribution as a claim on MW attributes. This might have negative implications for state energy programs.

<u>Problem Statement 6c)</u> Entities with jurisdictional compliance obligations or corporate emissions goals fulfilled through retail claims may not cover 100% of their real-time load obligation with owned or contracted power. In areas where LSEs are responsible for <u>both</u> owned/contracted power and real-time imbalance transfers, entities may experience challenges meeting jurisdictional requirements or corporate goals when they do not have sufficient information to report on the emissions intensity of net transfers.

<u>Problem Statement 7)</u> The market lacks a mechanism that enables Load-Serving Entities and Energy Users to accurately account for energy and associated emissions used to serve load under regulatory and voluntary GHG Reduction and Clean Energy goals.

Work Stream #3: Exploring Mechanisms for Addressing Non-Pricing and Clean Energy Policies, and Voluntary Goals

No market mechanism currently exists to reflect policies that require emissions reductions but do not establish a GHG price.

<u>Problem Statement 5)</u> When there are multiple unlinked GHG regulation areas or different reporting requirements by different states, market participation may result in double counting, undercounting, or inconsistent counting of emissions. Variations of this issue include:

a. Using both total WEIM transfer data and cost based accounting

<u>Problem Statement 6a)</u> Entities with annual reporting obligations or corporate goals associated with emissions reduction targets require data provided by the ISO to fulfill voluntary or non-voluntary reporting obligations with state policy, such as market imports to serve load or total emissions to serve load.

<u>Problem Statement 7a)</u> There is not a market mechanism in states with a declining cap on emissions for utilities to ensure load is served by generation and wholesale market transfers that meet those emission reduction targets

<u>Problem Statement 7b)</u> There is currently not a way to optimize a portfolio of resources at the EDAM Entity/ WEIM Entity/BAA/LSE level annually from a pre-market, in-market, or post-market perspective over the course of the year to adhere to state emission targets.

<u>Problem Statement 7c)</u> There is not a market mechanism in states with a declining cap on emissions to reflect both the declining cap and a price on carbon in the market for states that have both requirements.