

# Comments on Greenhouse Gas Coordination 5-29-2024 Working Group

## Department of Market Monitoring

June 12, 2024

The Department of Market Monitoring (DMM) appreciates the opportunity to comment on the *Greenhouse Gas Coordination 5-29-2024 Working Group*.<sup>1</sup>

This presentation discussed a number of greenhouse gas (GHG) issues, including emissions tracking and accounting, a market model to reflect non-priced GHG policies, price formation, and the GHG framework for the extended day-ahead market (EDAM). DMM agrees with the ISO's clarifications regarding the price formation of the GHG component of locational marginal prices (LMPs), and the differences between secondary dispatch and leakage. DMM also recognizes the trade-off on whether or not to account for non-GHG transfers in the GHG reference pass in EDAM, and recommends the ISO discuss this trade-off with air regulators.

During the working group, stakeholders brought forward concerns regarding the interpretation of the marginal GHG cost settled in each interval. DMM agrees with the ISO that the current marginal GHG component serves a specific purpose in determining locational marginal prices (LMPs). The purpose of LMPs is to provide adequate price signals to incentivize resources to operate in such a way to achieve the efficient dispatch determined by the market optimization. The marginal GHG cost is one component of the LMP and is determined by the shadow price of the attribution constraint designed to reflect the marginal cost of attributing an additional MW of GHG to the GHG area.

The current interpretation of marginal GHG cost is a mathematical implication from a model designed to achieve efficient market dispatch. DMM does not recommend adjusting constraints in the optimization to make the interpretation more meaningful to stakeholders. DMM agrees with the ISO's suggestion to consider a separate metric or additional data to uncover the type of information that stakeholders may be interested in regarding GHG costs.

One primary focus of the GHG working group is the issue of secondary dispatch, including discussions on developing metrics that accurately and meaningfully quantify secondary dispatch and leakage in the Western Energy Imbalance Market (WEIM). The ISO defined secondary dispatch in the WEIM as the GHG attribution that overlaps with a resource's base schedule. DMM's understanding is that leakage or backfilled dispatch occurs when a clean resource that would otherwise be serving a non-GHG area is instead attributed to a GHG area, and a higher-emitting resource backfills to serve the non-GHG area. DMM recommended the ISO distinguish between secondary dispatch that can lead to resource backfilling versus secondary dispatch that results from using base schedules as a counterfactual.<sup>2</sup> DMM supports the ISO's clarification that secondary dispatch can occur for a number of reasons, including

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<sup>1</sup> California ISO, *Presentation – Greenhouse Gas Coordination*, May 29, 2024:

<https://stakeholdercenter.caiso.com/StakeholderInitiatives/Greenhouse-gas-coordination-working-group>

<sup>2</sup> DMM *Comments on Greenhouse Gas Coordination 11-27-2023 Working Group*, December 11, 2023:

<https://www.caiso.com/documents/dmm-comments-on-greenhouse-gas-coordination-nov-27-2023-working-group-dec-12-2023.pdf>

economic displacement, decreases in the load forecast, and resource backfilling.<sup>3</sup> DMM continues to argue that because resources' base schedules are not optimized and do not account for optimal transfers between non-GHG areas, using base schedules as a counterfactual to determine leakage is problematic. The GHG reference pass in EDAM will provide a more appropriate counterfactual for analyzing leakage as it optimizes transfers between non-GHG balancing areas (BAs).

While the GHG reference pass in EDAM will provide a more accurate counterfactual for determining leakage, DMM recognizes that there are trade-offs to this design. By design, the market optimization will prioritize attributing available low-cost renewable generation to GHG areas to minimize total costs of serving load in an interval. If non-GHG transfers are not optimized in the GHG reference pass, then most excess low-cost renewable energy will likely be attributed to GHG areas. This could lead to increased secondary dispatch, including leakage. Alternatively, including non-GHG transfers in the GHG reference pass may lead to higher GHG costs to GHG areas, as excess low-cost renewable energy in non-GHG BAAs is likely to be dispatched to serve other non-GHG areas in this market run. The decision to include non-GHG transfers in the GHG reference pass is a trade-off between these two market outcomes. DMM recommends that the ISO work with regulators in GHG areas to ensure they understand this trade-off. Constraints and market designs aimed at limiting secondary dispatch and leakage impose costs to the market. Regulators and policy-makers can provide the most valuable feedback on how their policies affect costs to ratepayers.

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<sup>3</sup> California ISO, *Greenhouse Gas Coordination Working Group*, May 29, 2024, p 63:  
<https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-GHGCoordination-May29-2024.pdf>