

# WESTERN ENERGY IMBALANCE MARKET

## Decision on EIM Greenhouse Gas Attribution Enhancements

Don Tretheway

Senior Advisor, Market Design Policy

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# Current EIM greenhouse gas design recognizes only certain generation is subject to California Air Resources Board regulations

- Generation inside the ISO has a compliance obligation
- Generation outside the ISO has a compliance obligation when serving ISO load
- Generation outside the ISO does not have compliance obligation when serving non-ISO load

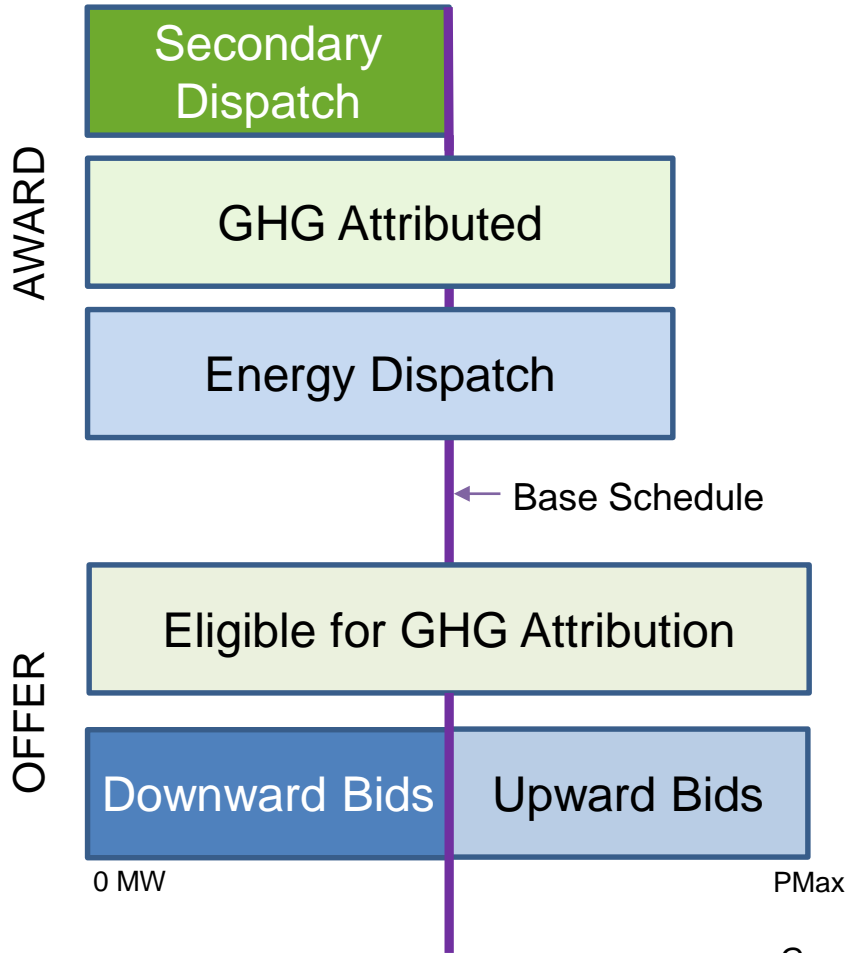
EIM participating resources submit a separate GHG bid MW quantity and price which expresses willingness to support EIM transfer to ISO

## Current design may not account for full atmospheric effects of serving ISO load

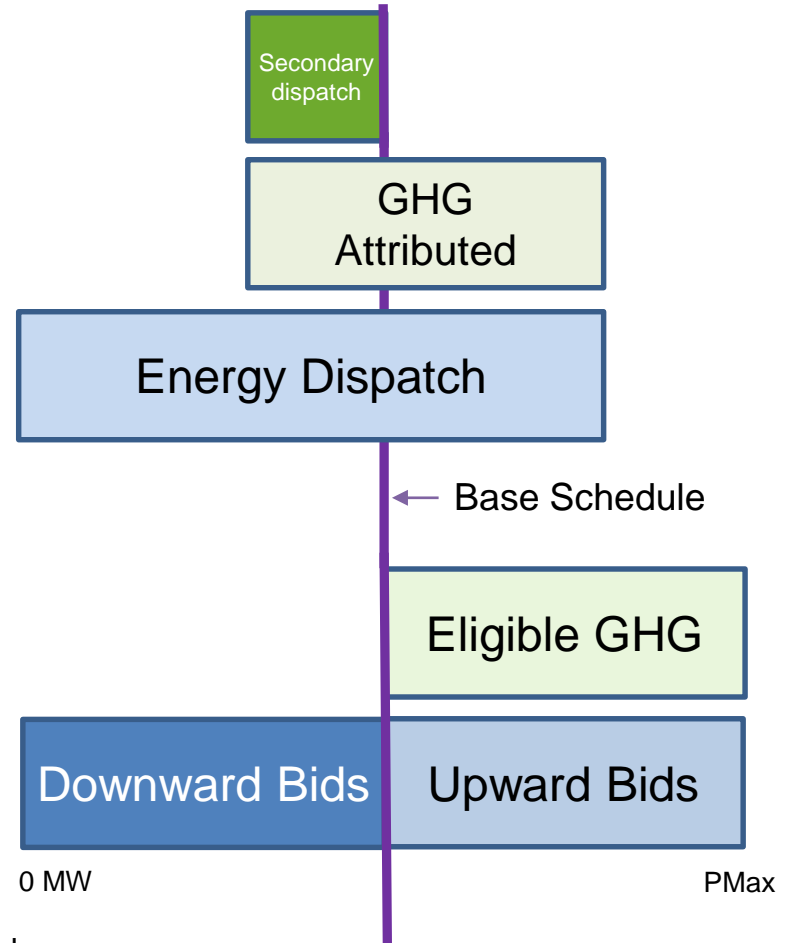
- Least cost dispatch can have effect of sending base scheduled, low greenhouse gas emitting resources to ISO
- However, does not account for “secondary” dispatch of other resources backfilling to serve external demand
- The emission associated with the backfilling resource may or may not have higher emissions

# Proposal reduces magnitude of secondary dispatch by reducing potential attribution quantity to base schedule

Current



Proposed Change



Generator A - Hydro

# Secondary dispatch may or may not cause under-accounting of full atmospheric effects

No change  
in emissions

Backfill Energy  
Dispatch

Generator C - Hydro

Emissions  
 $\leq$

Secondary Dispatch

Generator A - Hydro

Unaccounted  
emissions

Backfill Energy  
Dispatch

Generator B - Gas

Emissions  
 $>$

Secondary Dispatch

Generator A - Hydro

## Some stakeholders expressed concern that lower emitting resources may adjust base schedules lower to increase eligible MW for GHG attribution

- Sub-optimal base schedules will result in re-dispatch which can lead to additional costs
  - Imbalance energy settlement
  - Real-time congestion offset costs if unresolved congestion
  - No recovery of commitment costs if resource is self-committed
- Base schedules do not affect market optimization's price consistency or energy bidding incentives

## After robust initiative process, stakeholders generally support the proposed enhancement

- Improves the greenhouse gas attribution relative to current implementation
- Does not have price inconsistency or energy bidding behavior issues of prior proposals
- Management will monitor for any changes in base schedule practices of low emitting resources to capture greenhouse gas premium

# Management recommends approval of the EIM greenhouse gas attribution enhancements

- Reduces the potential magnitude of secondary dispatch
- Improves dispatch by more accurately attributing EIM transfers to upward dispatch capability
- Maintains the current price and incentive consistent market optimization