



Gas Management Challenges

June 21, 2023

Current Challenges

- We have repeatedly heard that CAISO entities are able to manage gas forecasting challenges that arise and as such this should not be an issue for other entities
 - **That is not the case:**
 - The storage capability is not there for most CA entities
 - There isn't the ability to trade with industrial customers
 - There is no borrowing/loaning arrangement
- Forecasting EIM/EDAM transfers is very difficult without a market wide optimization run - the issue is compounded by inaccurate load forecasting
- LADWP already sees challenges to its EIM participation primarily in the over/under burning of natural gas as a result of EIM transfer activity. Expected to a bigger issue with increased EDAM volumes
- The problem exists in Day Ahead and Real-Time (EIM) - CAISO market optimization needs to consider OFO conditions in unit commitment and dispatch

Current Challenges / Potential Resolutions

Scheduling Day	Flow Day
Monday (0500-0600)	Tuesday
Tuesday (0500-0600)	Wednesday
Wednesday (0500-0600)	Thursday
Thursday (0500-0600)	Friday
Friday (0500-0600)	Saturday, Sunday, Monday

- Purchases of gas for Monday (and Tuesday, if Monday is a holiday) are made on Friday the week before
 - The level of uncertainty is amplified for the end of week purchases – particularly without market wide optimization
- Most purchases are made by 0600, well ahead of the 1000 market deadline. This issue is compounded in real-time with OFO declarations and potential gas curtailments
- Aging Infrastructure, Frequent Pipeline Outages, Lesser Storage, More Frequent OFOs
- Adequate compensation for reference level/commitment costs helps
 - Appropriate compensation does not remedy pipeline reliability concerns
- A more accurate gas forecast that takes cognizance of use limitations, gas zones, and operational constraints
- A 2DA run will at least provide an initial position to trade from and may be more satisfactory than trying to bring the electric day forward to give more time for gas trading

Takeaways

- CAISO 2DA Transfer Forecast needs to be provided (expanded) to all EDAM participants
 - Current methodology of simulated bids, Or
 - Require 2DA bids and schedule submission
- Automation of reference level pricing and full recovery of commitment costs
- Development of group constraints to reflect use limitations, gas zones, and operational characteristics – this includes maximum burn rates (OFOs)
- All issues are irrelevant if load forecast in DA timeframe exceeds 3%



Questions?