



**Item 7: Proposed Updates to Board of
Directors Material on DAM Net Flow vs.
Real-Time Load**

Kenan Ögelman

Vice President, Commercial Operations

Finance & Audit Committee Meeting

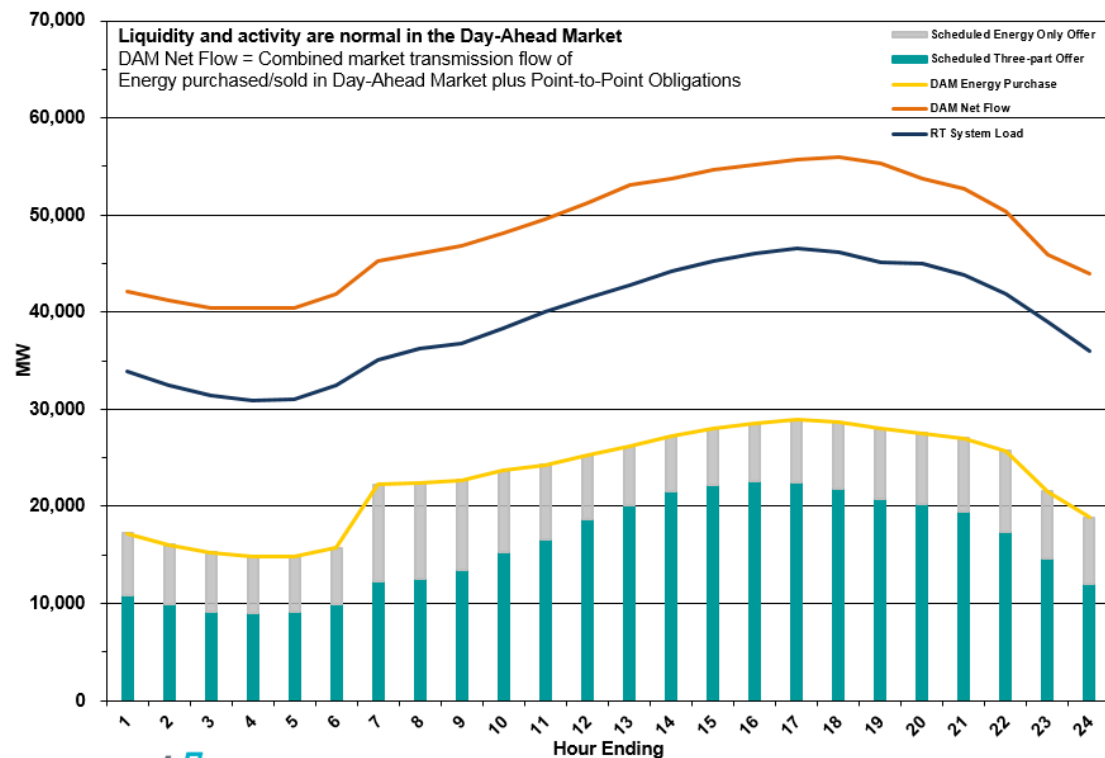
ERCOT Public

December 11, 2017

Day-Ahead Schedule (Hourly Average) – BOD Report

- Since the inception of the nodal market, the data in the chart to the right has been presented to inform the “Percentage of Real-Time Load Hedged in the Day-Ahead Market”
- This label implies that the metric includes only DAM activity to hedge RT Load, and gives the appearance of persistent, significant over-hedging in the DAM
- This metric is based on total DAM net flow at all Resource Nodes, Hubs and Load Zones, which includes transactions made for hedging physical Load positions as well as speculative trading

Day-Ahead Schedule (Hourly Average) – October 2017



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DAM Net Flow Only at Load Zone

- A better estimation of the metric would be to:
 - Include only the DAM net flow at Load Zones
 - Include only the DAM net flow for QSEs with Real-Time Load
 - Calculate the ratio of DAM net flow at Load Zones for QSEs with Real-Time Load compared to Real-Time Load
- An additional change could be to further restrict the DAM net flow to only those specific Load Zones in which a QSE has Real-Time Load

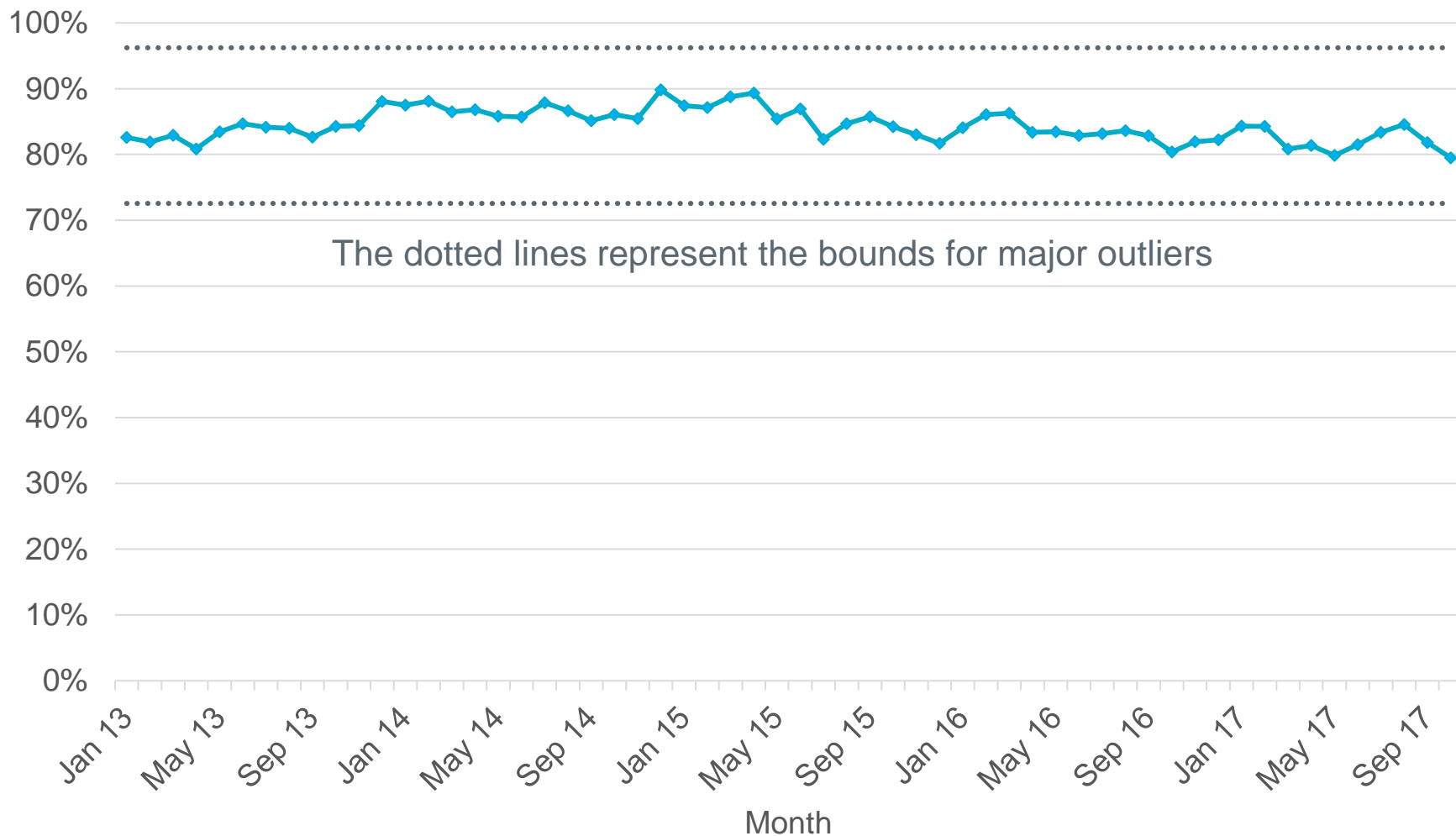
Comparison of Current and Modified DAM Net Flow Metrics

QSE A: Serves Real-Time Load at a Load Zone

QSE B: Financial only (no Real-Time Load)

Scenario	Included in Current Metric?	Included in Modified Metric?
QSE A buys X MW at LZ in DAM	✓	✓
QSE A has X MW Energy Trade Purchase with QSE B at HUB; QSE A buys X MW point-to-point obligation from HUB to LZ in DAM	✓	✓
QSE A has X MW Energy Trade Purchase with QSE B at LZ; QSE B buys X MW at LZ in DAM	✓	✗
QSE B buys X MW at LZ in DAM	✓	✗
QSE B buys X MW point-to-point obligation from Resource Node to HUB in DAM	✓	✗
QSE A buys X MW at HUB in DAM	✓	✗

Percentage of Real-Time Load Transacted in the DAM - October 2017



Percentage of Real-Time Load Transacted in the DAM - October 2017

- In addition to adding the new graph, the “Market Statistics” slide in the monthly operations report would be updated to reflect the new methodology.
- Have also made a minor change to the name of the statistic.

Market Statistics – October 2017

Numbers reflecting the new methodology

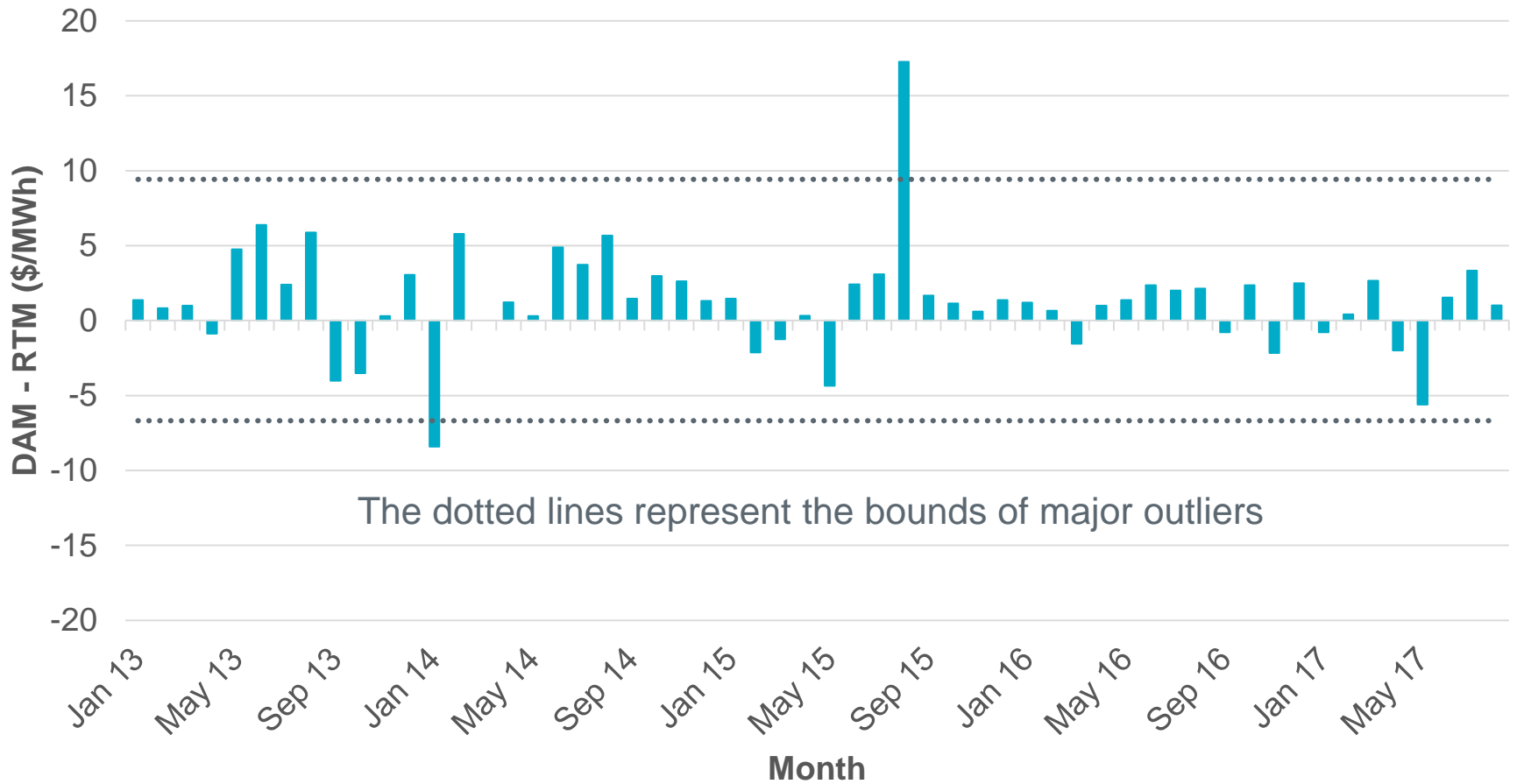
Market Statistics	October 2016	October 2017	2016 Average	2017 YTD Average
Percentage of Real-Time load transacted in the Day-Ahead Market	80.4%	79.5%	83.3%	82.2%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	27.84	26.39	24.56	27.34
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	25.48	27.91	23.51	27.32
Average East Houston Fuel Index Price (\$/MMBtu)	3.08	2.93	2.45	3.00

New Price Convergence Graph

- There was also a request to include a new price convergence graph comparing prices in the Day-Ahead and Real-Time Markets
- This was done using the ERCOT Hub Average Settlement Point Prices that are currently reported monthly to the Board as part of the Operations Report
 - The graph looks at the monthly price in the Day-Ahead Market minus the monthly price in the Real-Time Market (RTM)
 - For both of the new graphs, there are dotted lines representing the bounds of major outliers
 - A “major outlier” is defined as a value that is less than the first quartile or greater than the third quartile by more than 3 times the interquartile range
 - These bounds would incrementally adjust with time as market behavior changes

DAM and RTM Price Convergence

Comparison of DAM and RTM Averages of ERCOT Hub Average Settlement Point Prices



Questions?