

# Quick Hits Review and Metrics

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Reliable **Markets**

Reliable **People**



# Today's Objective



- QH Overview
- Metrics Discussion
- Next Steps

# Quick Hits Overview



- DOE Policy Paper issued in 2005 ; extensive industry consultation identified “Quick Hits” package of market design improvements.
- Quick hits rules changes implemented on Dec 3, 2007.
- AESO agreed to reporting on the market after six months of operating under the Quick Hits rules.
- AESO will be releasing a discussion paper outlining the proposed package of Quick Hits metrics that it intends to develop to monitor the market. Some metrics will contain confidential data which will not be published.
- AESO is seeking industry input on the proposed metrics package as well as any potential AESO rule changes or improvements related to Quick Hits.

# Quick Hits Metrics Discussion



- Quick Hits Objectives:
  - Improved visibility of available supply
  - Improvements in pool price credibility, stability, and undue volatility
- Quick Hits Implementation Areas:
  - Merit Order Stabilizers- MC, AC, Restatements, AOR
  - Treatment of Imports and Exports
  - TMR and DDS
  - Payments to Suppliers on the Margin
  - Adequacy and Price Forecasting
- Quick Hits Metrics will focus on each implementation area

# Merit Order Stabilizers

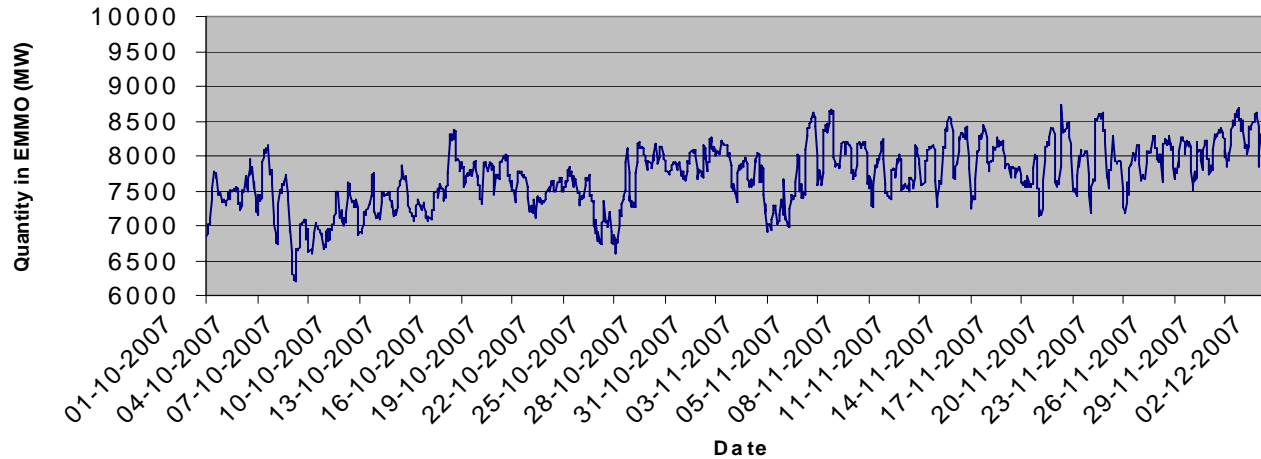


- Supply Visibility — by asset, by fuel type and in total; day ahead and real time
  - Maximum Capability- track changes
  - Available Capability- pre and post QH; trends
  - Mandatory Energy Restatements- pre and post QH; trends; within T-2
  - Acceptable Operating Reasons- pre and post QH; trends
- Pool Price Analysis
  - Price Restatements- pre and post QH; trends
  - Energy Market Merit Order- pre and post QH; trends
  - Merit Order Dispatch- SMP changes pre and post QH; trends

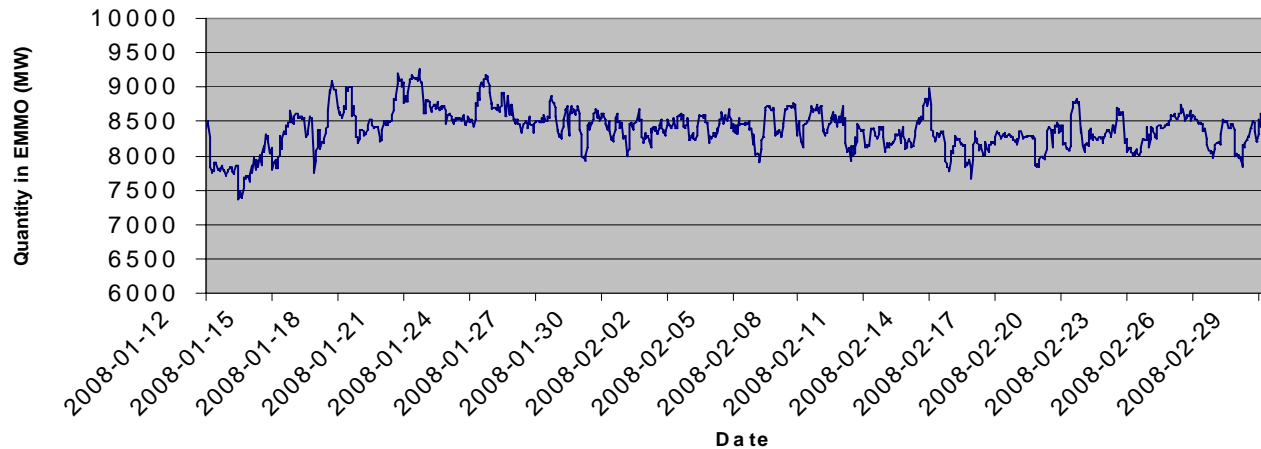
# Supply Visibility- Daily

## Total Energy Market Merit Order (EMMO) Supply

**Top Of EMMO - Net of Inerties**  
**Pre-Quick Hits (Nov 1, 2007 to Dec 2, 2007)**

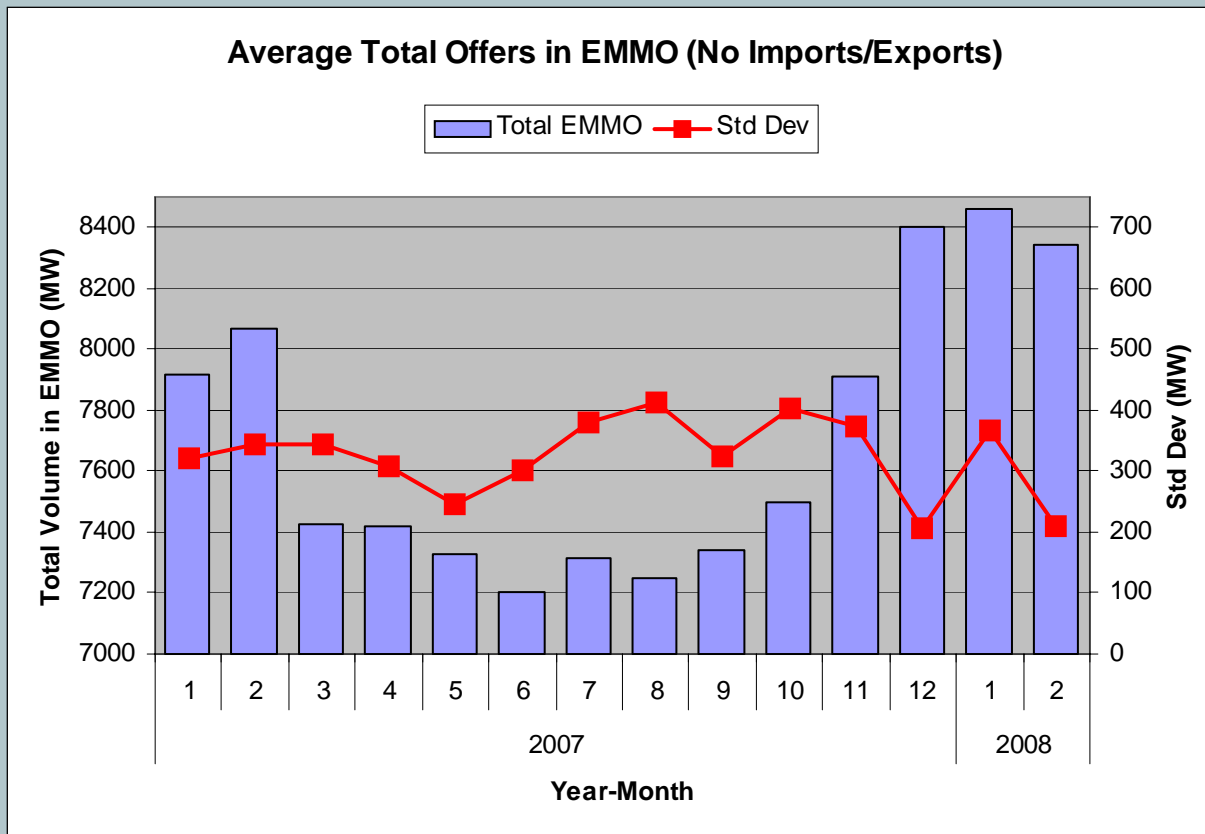


**Top Of EMMO - Net of Inerties**  
**Post-Quick Hits (Jan 12, 2008 to Feb 29, 2008)**



# Supply Visibility- Monthly

## Total Energy Market Merit Order (EMMO) Supply

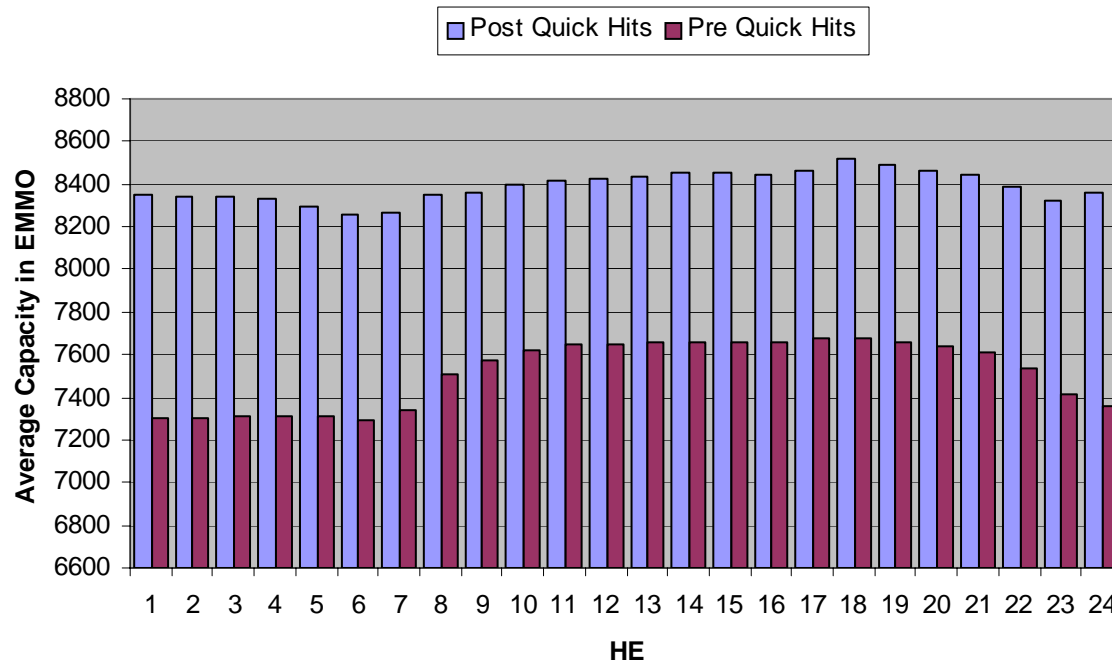


# Supply Visibility- Hourly

## Total Energy Market Merit Order (EMMO) Supply



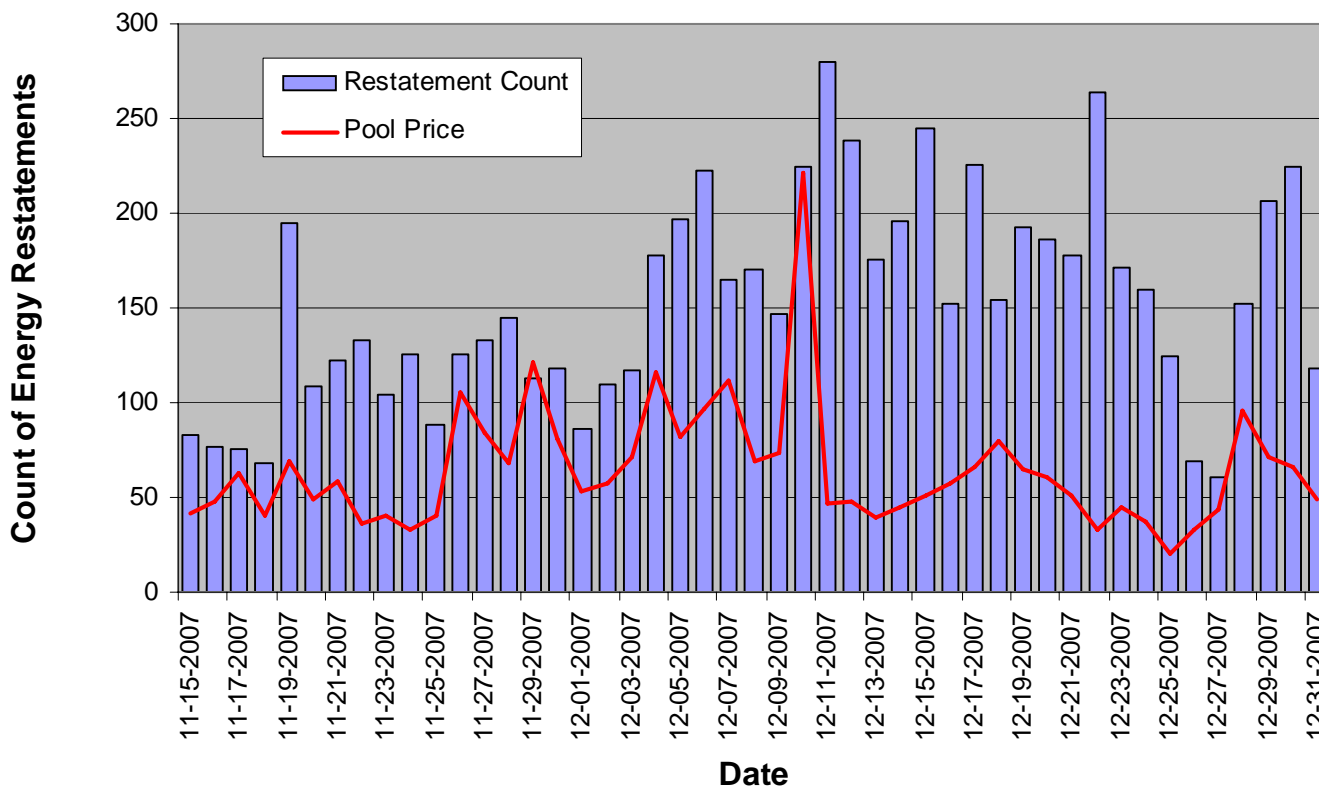
**Average Supply in EMMO Pre and Post Quick Hits  
(Jan 2007 to March 2008)**



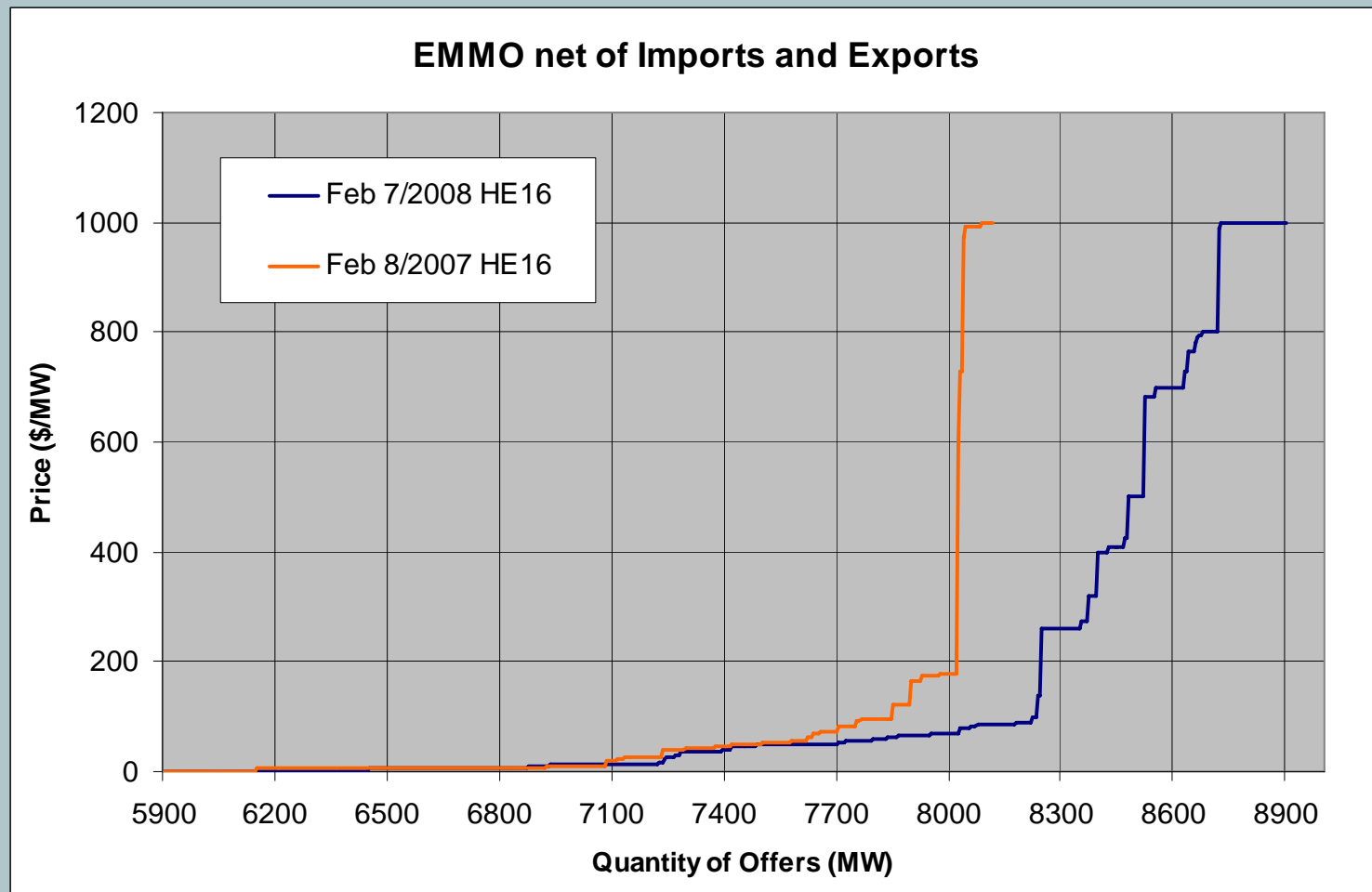
# Supply Visibility- Daily Changes

## Total Mandatory Energy Restatements within T-2

### Daily Count of Energy Restatements Within T-2

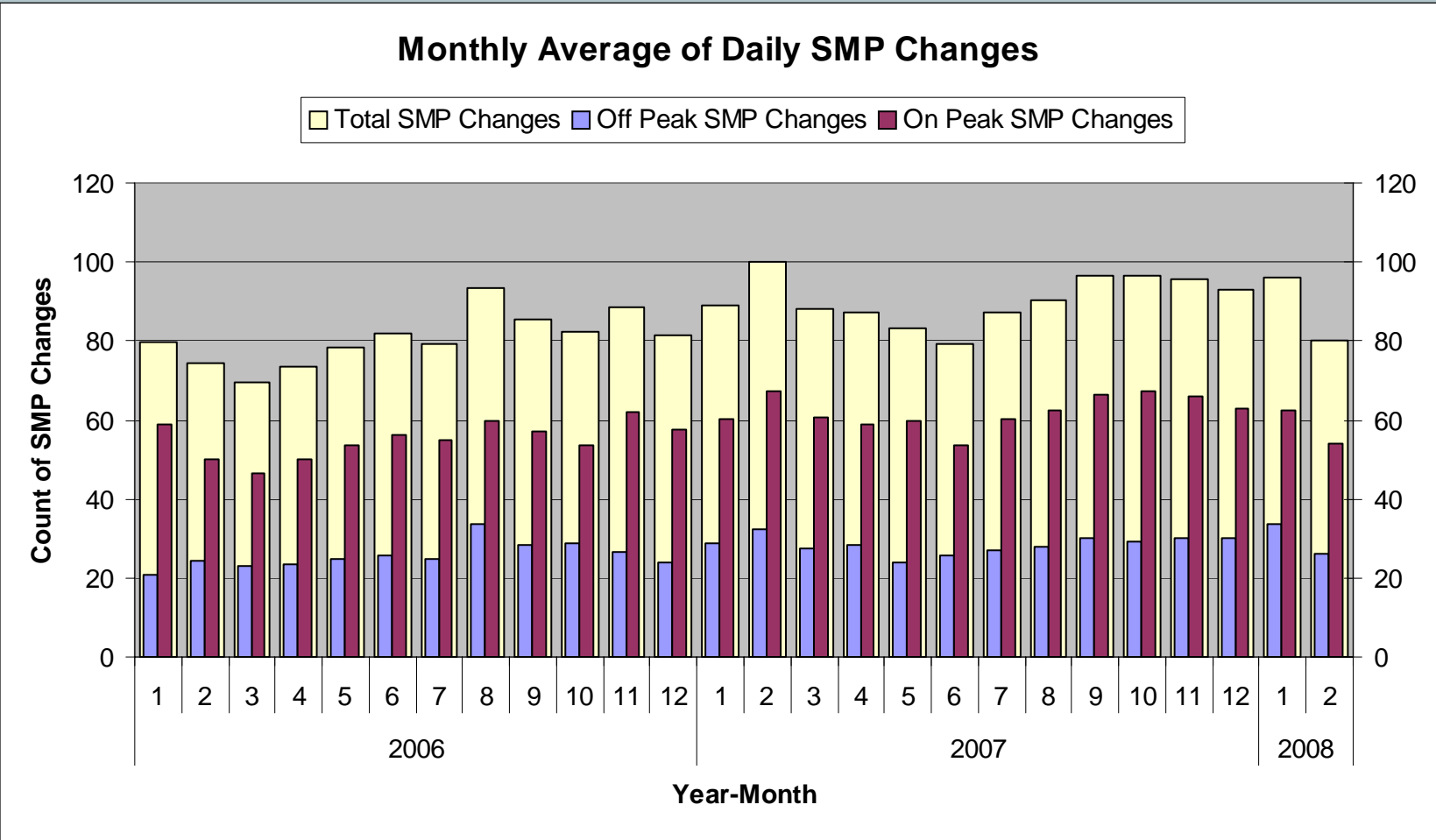


# Pool Price Analysis- Energy Market Merit Order



# Pool Price Analysis-

## Merit Order Dispatch



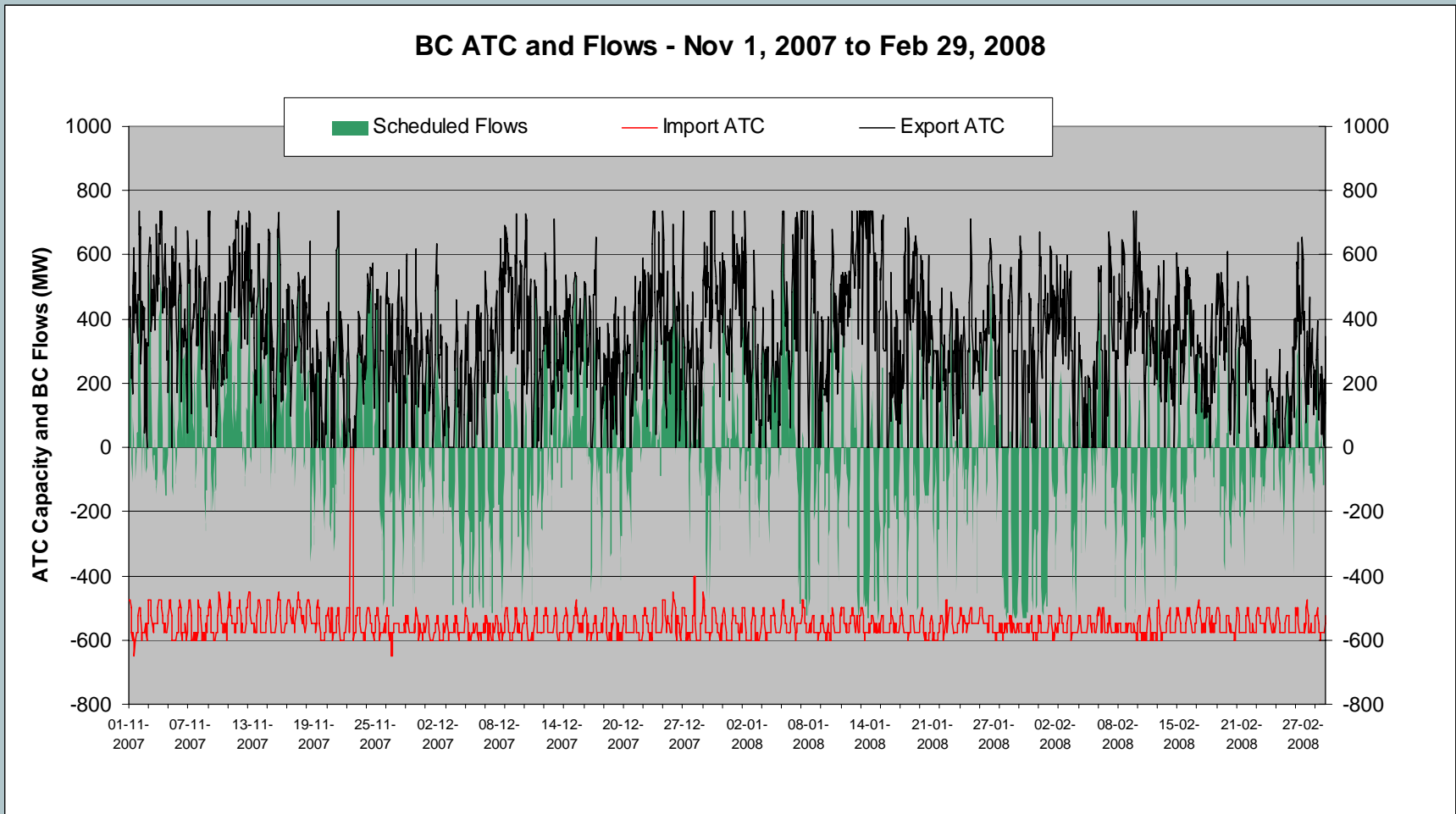
# Treatment of Imports and Exports



- AC and ATC trends:
  - Pre and post Quick Hits
  - T-2 data and in real time
  - Occurrences where ATC limits supply and magnitude of impact

# Imports and Exports

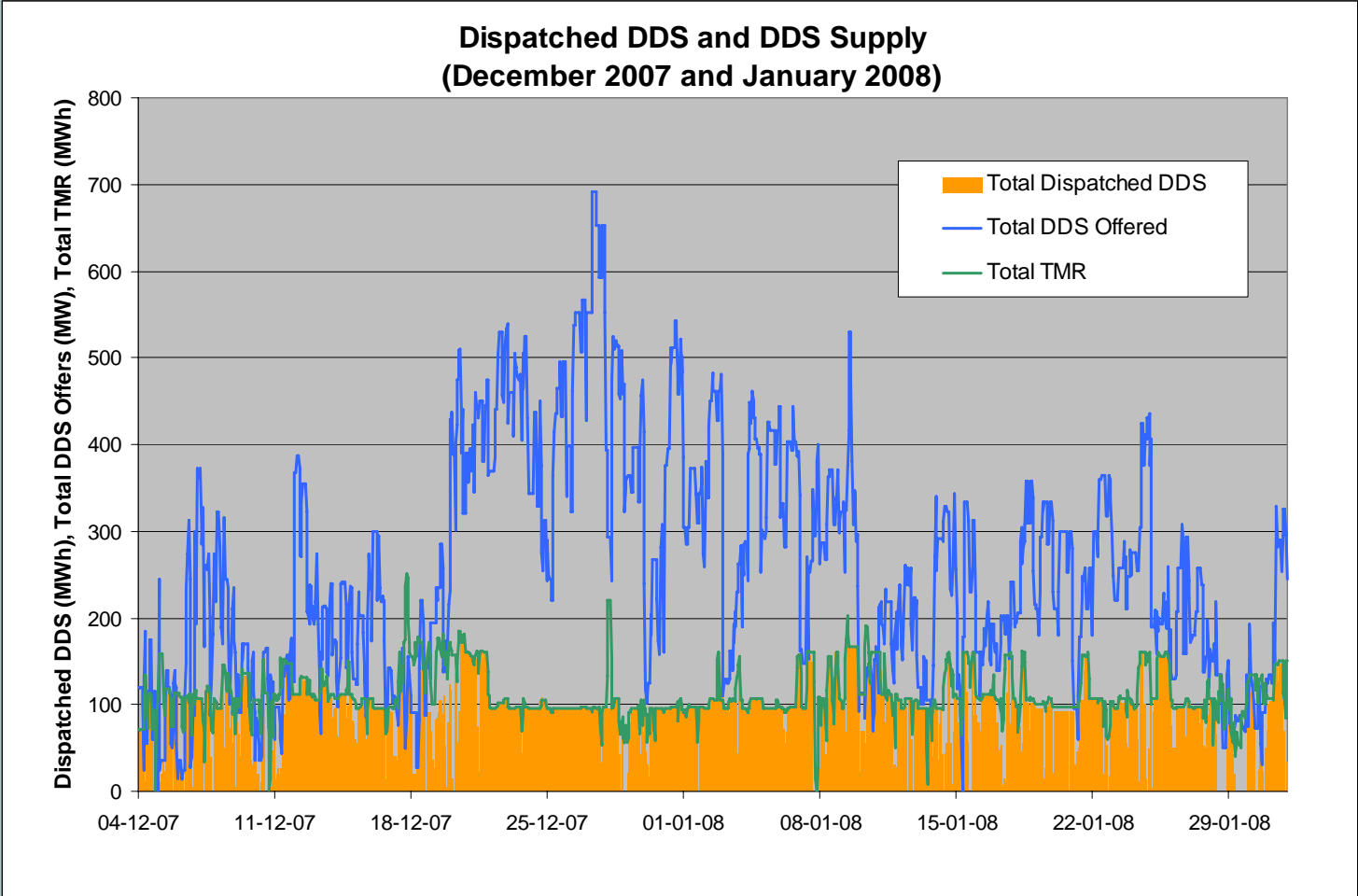
## BC ATC and Flows - Nov 1, 2007 to Feb 29, 2008



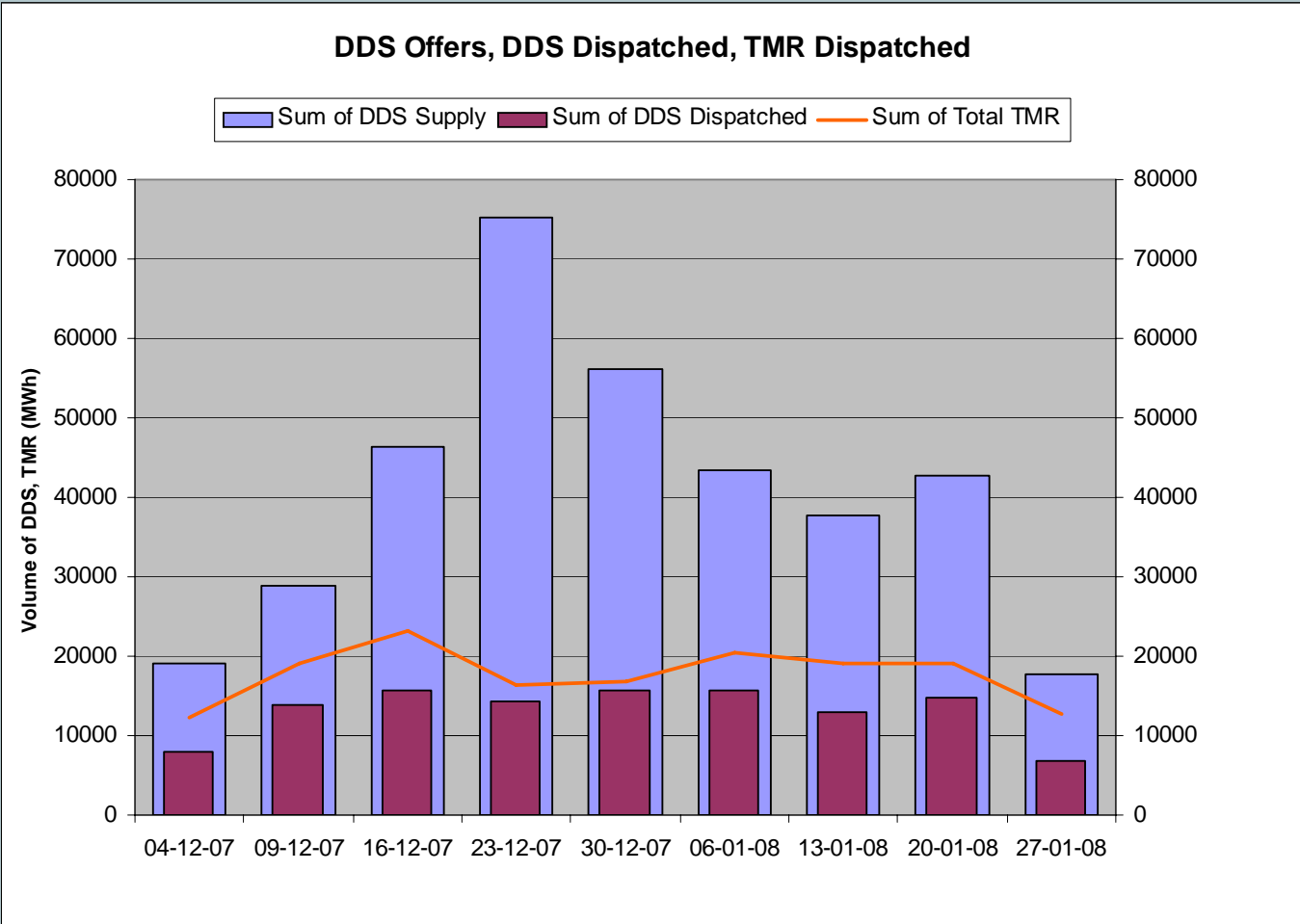
# TMR and DDS

- TMR, DDS Supply and Dispatched DDS
  - Trends over time
  - Reference price impacts
- DDS Costs
  - Trends over time
  - Comparisons to pool price
- DDS Impact on Pool Price
  - Trends over time
  - Comparisons to overall pool price and total dollar impact

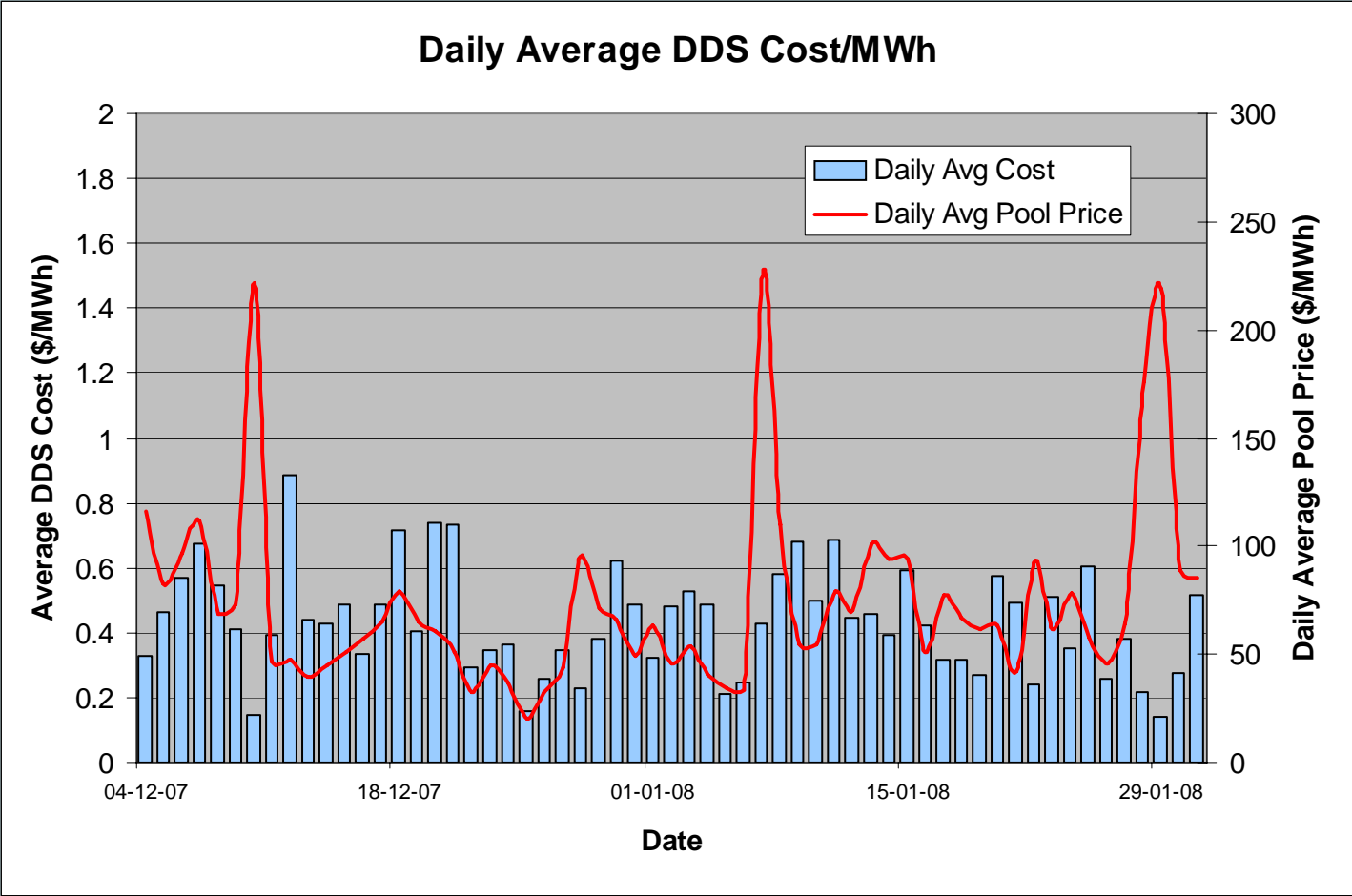
# Dispatch Down Service Daily Activity



# Dispatch Down Service Monthly Activity



# Dispatch Down Service Daily Costs



# Other Implementation Areas



- Payments to Suppliers on the Margin
  - Monthly payment history- Total \$, \$/MWh, MW's, Frequency
  - Comparison to pool price- \$/MWh uplift
  - Payment by fuel type and customer
  - Payment by time of day
- Adequacy and Price Forecasting
  - Adequacy comparison:
    - Actual to Two hour supply forecast- demand/supply deviations
    - Two hour supply forecast trends over time- accuracy improvements
  - Price comparison:
    - Actual to Two hour supply forecast- accuracy improvements
    - Two hour forecast trends over time- stability indicators

# Next Steps

- A discussion paper outlining the proposed package of Quick Hits metrics will be issued and industry recommendations for improvement will be sought.
  - The paper will request written comments be provided to Gordon Nadeau by a specific date
  - Input can be provided to market services at any time during the review period
- Industry input will be incorporated into the final metrics package as appropriate.
- The AESO will monitor the market utilizing the metrics on an ongoing basis and seek industry input on potential AESO rule improvements related to Quick Hits.

# Next Steps



- A report on the market covering the December 2007 to June 2008 period will be prepared in Q3 and will focus on the Quick Hits rule impacts.
- If appropriate, the AESO will make recommendations for rule changes based on the market analysis and stakeholder feedback.