



Seasonal Analysis of PRR 763 – Day Ahead WGR Resource Plan Performance

ERCOT Board of Directors
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PRR 763 Analysis

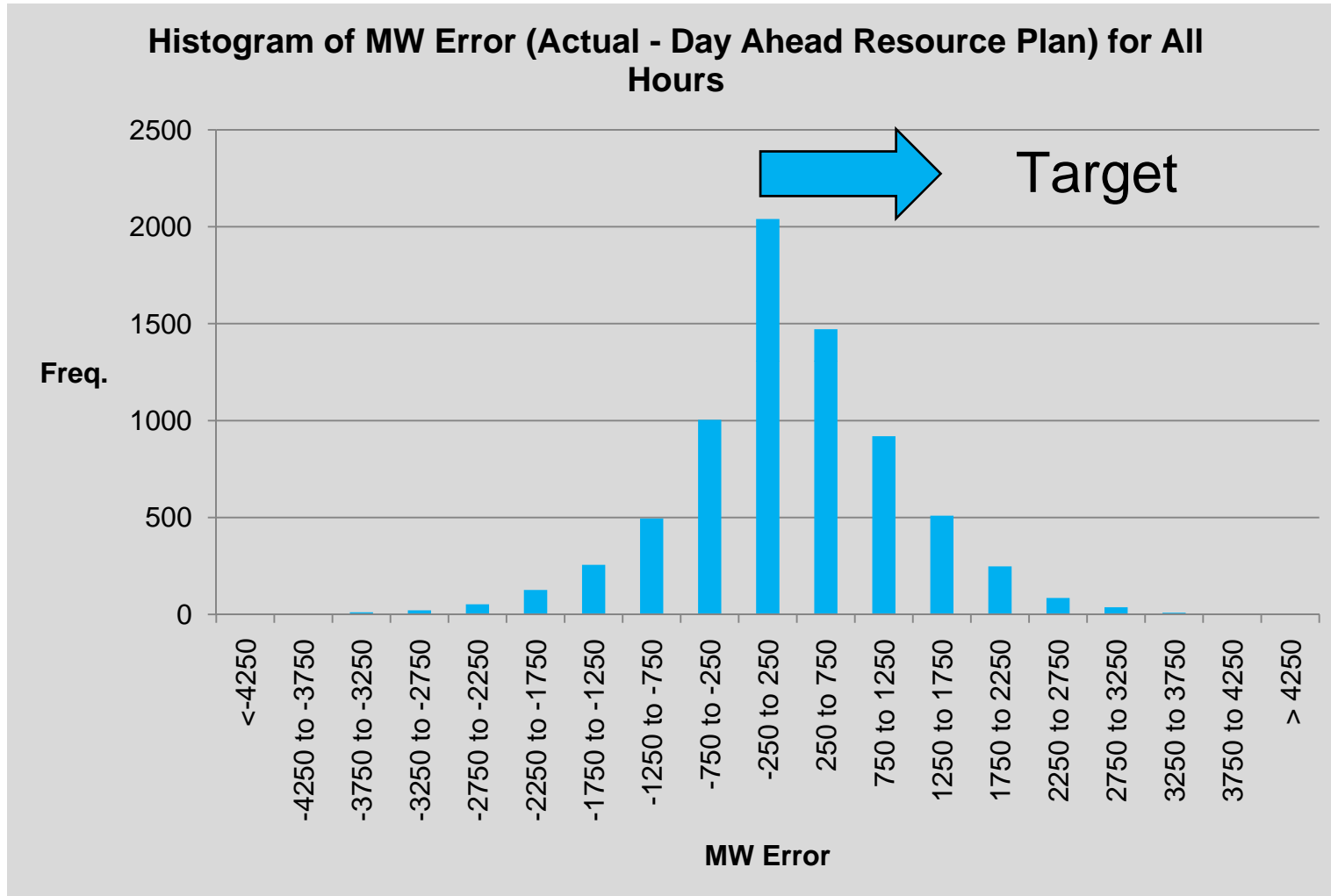
- **PRR 763 became effective in July 08 and requires the use of the AWS forecast in the Day Ahead Resource Plans**
- **Analyze the months of November 08 – August 09**
- **Determine how effective the 80% AWS forecast has been through multiple seasons**
- **The following histogram slides are intended to demonstrate the difference in actual wind output as compared to forecast wind output.**
- **The forecasted output for this analysis is from the Resource Plans which should contain the AWS 80% forecast**
- **The first slide indicates the amount of error in actual versus forecast for November 08 – August 09 and gives an indication of performance on meeting 80% target.**
- **The next four slides are histograms of the forecast error in MWs over different time periods.**
- **The goal of the 80% forecast is to ensure that the wind output is under-forecasted (i.e. positive error)**

Day Ahead Resource Plan Performance

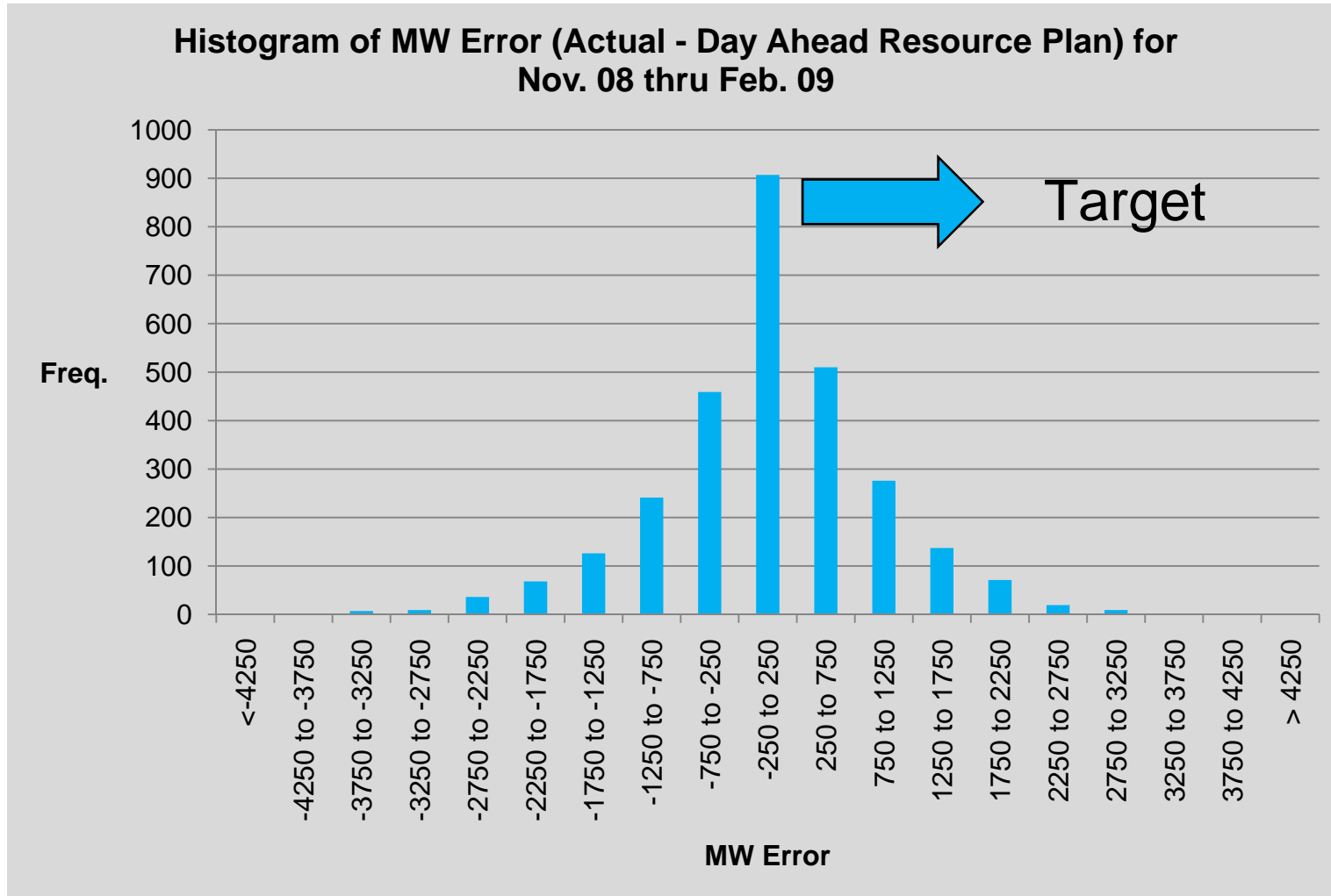
- **The Down Balancing Energy Service (DBES) deployments, which include unit specific deployments, for wind only QSEs has been added back to the aggregate WGR output to estimate non-curtailed wind output.**
- **QSEs are required to use the AWST 80% probability of exceedence forecast for their Day-Ahead Resource Plans.**
- **Some changes in performance may be due to forecast model improvement and not necessarily to seasonal variations.**

	All Hours	November '08 - February '09	March '09 - May '09	June '09 - August '09
Percent of Hours Actual >= Day Ahead Resource Plan	60.25%	51.88%	65.43%	65.99%
Mean MW Error (Actual - Day Ahead Resource Plan)	192.44	8.71	279.08	345.50

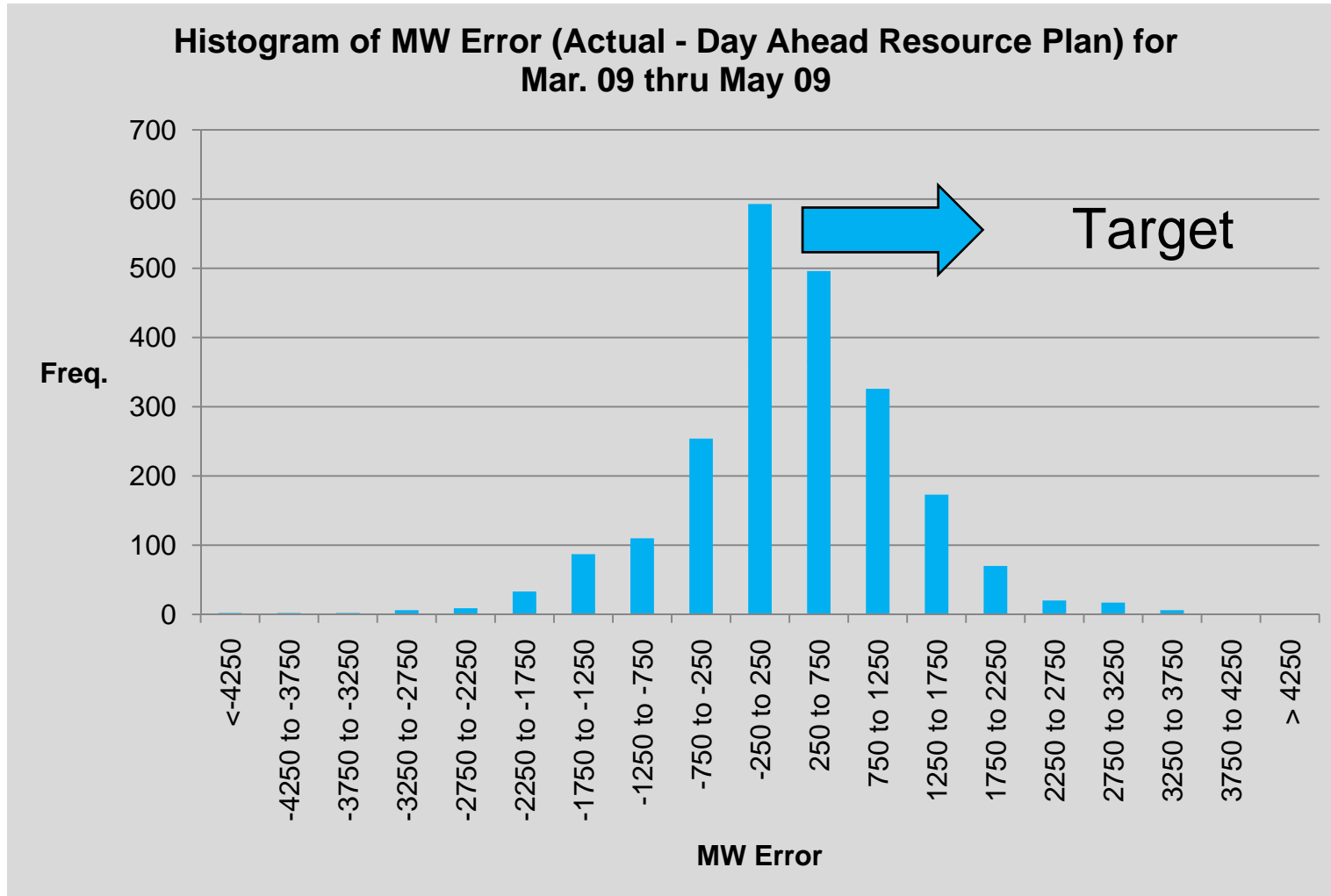
Histograms of Day-Ahead Forecast Error



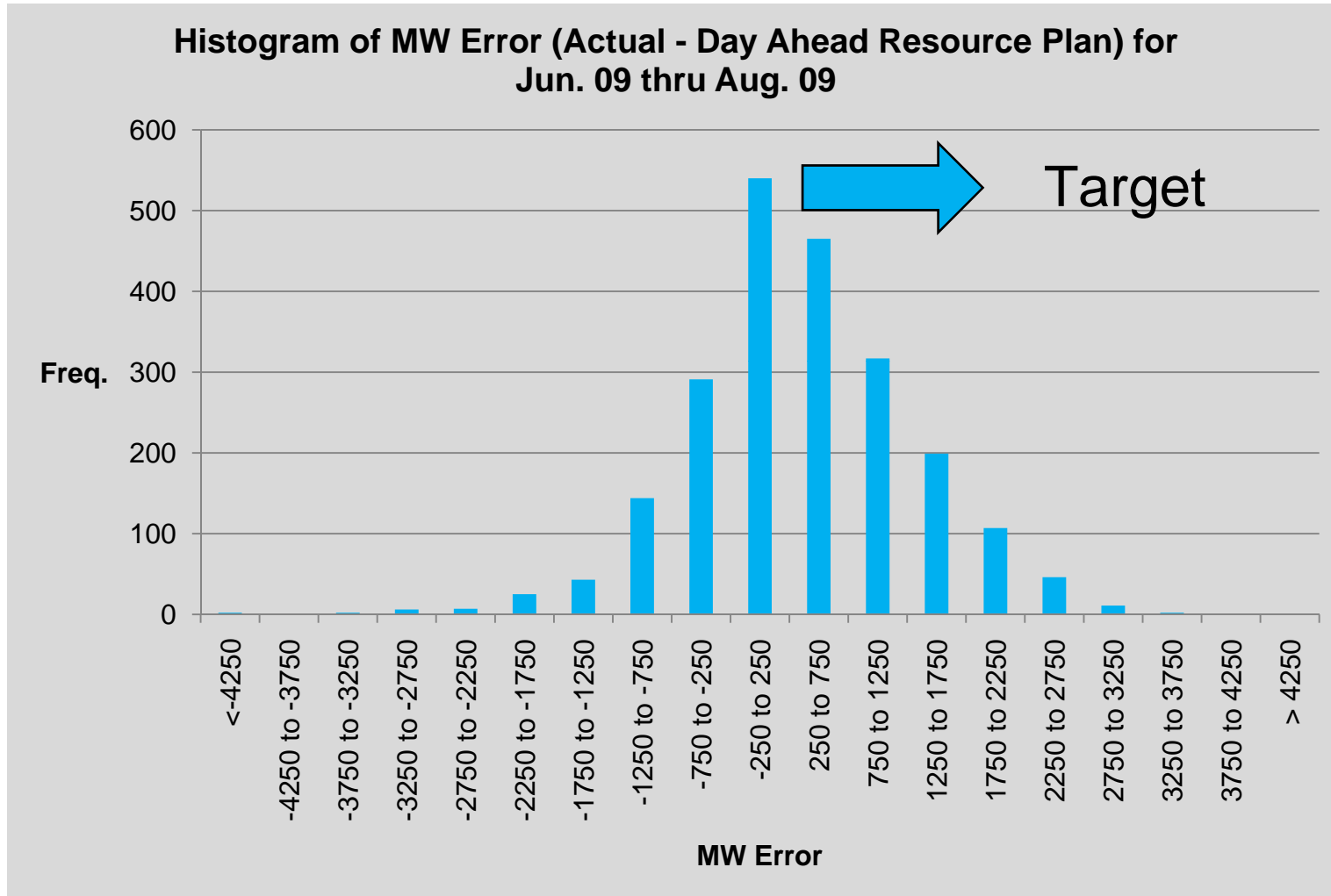
Histograms of Day-Ahead Forecast Error cont.



Histograms of Day-Ahead Forecast Error cont.



Histograms of Day-Ahead Forecast Error cont.



Summary

- **Performance for meeting the 80% target indicates improvement from November 08 to August 09**
- **Histograms indicate that the majority of the errors tend to be in the -250 to +250 MW range even with the 80% target.**
- **Unable to distinguish seasonal affects from model improvements**