



HSIM Updates: FTR Class Type Prices

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Background

- In September 2022, FTR auction off peak class type was split into two new class types: DailyOffPeak and WkndOnPeak
- HSIM requires both historical FTR auction cleared and historical Day-Ahead settled prices for the two new class types.

Current Methodology For HSIM

- Hours Ratio - PJM applied a ratio of the hours methodology and split existing historical Offpeak prices into historical DailyOffPeak and historical WkndOnPeak price sets

DailyOffPeak price = Offpeak Price x (sum DailyOffPeak hours/ sum Offpeak hours)

WkndOnPeak price = Offpeak Price x (sum WkndOnPeak hours/ sum Offpeak hours)

- This method retains the same average \$/mwh prices for all the class types

New Methodologies Tested

- Since September, PJM has tested alternative methods for splitting the off-peak prices to determine if another method might be more suitable

Methods Tested

1. Price Ratio - Sum up the actual Day Ahead settled historical prices for each class type, for each month. This method results in different average \$/mwh for each class type
 - Calculate a Day Ahead ratio of the new class types to Offpeak prices then apply it to historical FTR auction cleared prices to calculate a corresponding set of DailyOffPeak and WkndOnPeak FTR auction prices
2. Linear Regression - Determine a linear regression relationship between the class type Day Ahead prices in method #1 and apply it to FTR Auction cleared prices to calculate new regression based DailyOffPeak and WkndOnPeak FTR auction prices

Observations From Testing

1. Both the price ratio and linear regression methodologies when applied to historical FTR auction cleared prices created artificial price volatility which has not actually been observed in history since the products were not hitherto traded
2. Day Ahead DailyOffPeak prices and WkndOnPeak prices for the same period were at times, in the settled price history, observed to be completely offsetting (opposite signs -/+), when this is applied to cleared auction prices it would create an artificial, sometimes negative, clearing price that cannot be explained

Conclusion

1. For Day Ahead price history: use actual historical settled prices
2. For FTR Auction cleared price history: use the currently implemented, class hours ratio to offpeak prior to September 2022 and the actual FTR auction clearing prices thereafter

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HSIM Update for FTR Class Type Prices



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