



# PJM FERC EQR Updates

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- PJM has ongoing discussions with FERC regarding data scope and presentation on EQR
- In recent discussion, FERC directed using the total LMP value in the EQR Price column for Spot Market Energy transactions
- PJM currently uses PJM system energy price in EQR Price column and aggregates implicit congestion and loss values into the EQR Total Transmission Charge column

- Updates to Section 11 Appendix B on MSRS FERC EQR documentation:

PJM Billing Line Item	Net Stlmnt? (Cr - Ch)	EQR Product	Location	Transaction Quantity	Price	Units	Transaction Amount	When to Report (Reporting Trigger)
Day-ahead Spot Market Energy	Y	ENERGY	PNODE Name	$= (\text{Day-Ahead Withdrawal MW} - \text{Day-Ahead Energy Injection MW}) * -1$ <p>Note: Transaction Quantity excludes virtual transaction components</p>	DA Location Total LMP	\$/MWH	$(\text{Transaction Quantity} * \text{Price}) + (\text{Day-ahead Congestion Charge} + \text{Day-ahead Losses Charge}) * -1$	$= (\text{Day-Ahead Withdrawal MW} - \text{Day-Ahead Energy Injection MW}) < 0$
Balancing Spot Market Energy	Y	ENERGY	PNODE Name	$= ((\text{Real-Time Withdrawal MW} - \text{Day-Ahead Withdrawal MW})/12 - (\text{Real-Time Injection MW} - \text{Day-Ahead Injection MW})/12) * -1$ <p>Note: Transaction Quantity excludes virtual transaction components</p>	RT Location Total LMP	\$/MWH	$(\text{Transaction Quantity} * \text{Price}) + (\text{Balancing Congestion Charge} + \text{Balancing Losses Charge}) * -1$	$(\text{Day-Ahead Withdrawal MW} - \text{Day-Ahead Energy Injection MW}) < 0$ <p>or</p> $((\text{Real-Time Withdrawal MW} - \text{Day-Ahead Withdrawal MW}) - (\text{Real-Time Injection MW} - \text{Day-Ahead Injection MW})) + \text{Load Reconciliation MWh}$ <p>&lt; 0</p>

## Current EQR Day-Ahead Spot Market Energy and Real-Time Spot Market Energy Transactions:

trans_id	transaction_begin_date	transaction_end_date	trade_date	specific_location	product_name	transaction_quantity	price	units	standardized_quantity	standardized_price	total_transmission_charge	transaction_charge
PJMDASME01234ABCDE	201808012300	201808020000	20180731	PNODEA1B2	ENERGY	38	25.34	\$/MWH	38	25.34	136.42	1099.34
PJMDASME01235ABCDE	201808012300	201808020000	20180731	PNODEA2B3	ENERGY	38	25.34	\$/MWH	38	25.34	85.5	1048.42
PJMRTSME01236FGH	201808020935	201808020940	20180802	PNODEB3C4	ENERGY	0.755	30.51	\$/MWH	0.755	30.51	4.07	27.11
PJMRTSME01237FGH	201808020935	201808020940	20180802	PNODEB4C5	ENERGY	0.336	30.51	\$/MWH	0.336	30.51	0.35	10.6
PJMRTSME01250IJK	201808011710	201808011715	20180801	PNODECD20	ENERGY	11.247	87.13	\$/MWH	11.247	87.13	-217.56	762.39

\*Note: some columns are removed for size

- Prices are the same value for transactions with same transaction\_begin\_date regardless of specific\_location
- Implicit and explicit congestion and loss charges for location and transaction are aggregated into total\_transmission\_charge column

## Updated EQR Day-Ahead Spot Market Energy and Real-Time Spot Market Energy Transactions:

trans_id	transaction_begin_date	transaction_end_date	trade_date	specific_location	product_name	transaction_quantity	price	units	standardized_quantity	standardized_price	total_transmission_charge	transaction_charge
PJMDASME01234ABCDE	201808012300	201808020000	20180731	PNODEA1B2	ENERGY	38	28.93	\$/MWH	38	28.93	0	1099.34
PJMDASME01235ABCDE	201808012300	201808020000	20180731	PNODEA2B3	ENERGY	38	27.59	\$/MWH	38	27.59	0	1048.42
PJMRTSME01236FGH	201808020935	201808020940	20180802	PNODEB3C4	ENERGY	0.755	35.91	\$/MWH	0.755	35.91	0	27.11
PJMRTSME01237FGH	201808020935	201808020940	20180802	PNODEB4C5	ENERGY	0.336	31.55	\$/MWH	0.336	31.55	0	10.6
PJMRTSME01250IJK	201808011710	201808011715	20180801	PNODECD20	ENERGY	11.247	65.33	\$/MWH	11.247	65.33	27.62	762.39

- Prices differ based on specific\_location for transactions with same transaction\_begin\_date
- Implicit congestion and loss charges for location are now encompassed in price value
- Explicit congestion and loss charge values associated with energy transaction are still aggregated into total\_transmission\_charge column



- Updated documentation for FERC EQR can be found under 5 minute settlements tab and FERC EQR sub tab on the MSRS Reports Documentation web page on PJM.com
  - <https://www.pjm.com/-/media/markets-ops/settlements/msrs/5-minute-settlements/ferc-eqr/ferc-eqr-descr.ashx?la=en>