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| NPRR Number | 344 | NPRR Title | Define RMR Fuel Adder | |
| Timeline | Normal | Action | | Recommended Approval |
| Date of Decision | | April 21, 2011 | | |
| Proposed Effective Date | | To be determined. | | |
| Priority and Rank Assigned | | To be determined. | | |
| Nodal Protocol Sections Requiring Revision | | 3.14.1.16, Reporting Actual Eligible Costs  6.6.6.2, RMR Payment for Energy | | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) defines the term “fuel adder” as reported by Resource Entities when filing Reliability Must-Run (RMR) contracts. The NPRR also clarifies that the fuel adder will be true-up to reflect actual fuel costs incurred. | | |
| Reason for Revision | | This NPRR is submitted to ensure accurate fuel prices are used when calculating Three-Part Supply Offers for the Day-Ahead Market (DAM). When a Resource Entity files an RMR contract, it must provide to ERCOT the estimated fuel adder as part of its Eligible Costs submission. This fuel adder is added to the appropriate index price to establish the Three-Part Supply Offers. If the fuel adder is not accurate, it can skew the Three-Part Supply Offers and impact DAM results. After the DAM has cleared, Resource Entities have the option of filing with ERCOT their actual fuel costs prior to the Final or True-up Settlements. | | |
| Overall Market Benefit | | More accurate representation of actual costs in the DAM. | | |
| Overall Market Impact | | None. | | |
| Consumer Impact | | None. | | |
| Credit Impacts | | To be determined. | | |
| Procedural History | | * On 4/1/11, NPRR344 and an Impact Analysis were posted. * On 4/11/11, WMS comments were posted. * On 4/21/11, PRS considered NPRR344. | | |
| PRS Decision | | On 4/21/11, PRS unanimously voted to recommend approval of NPRR344 as submitted. All Market Segments were present for the vote. | | |
| Summary of PRS Discussion | | On 4/21/11, there was no discussion. | | |

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| Quantitative Impacts and Benefits | | | | |
| Assumptions | | 1 |  | |
| 2 |  | |
| 3 |  | |
| 4 |  | |
| Market Cost | |  | **Impact Area** | **Monetary Impact** |
| 1 | *None.* | *None.* |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| Market Benefit | |  | **Impact Area** | **Monetary Impact** |
| 1 | *More accurate representation of actual costs in the DAM.* | *Unknown.* |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| Additional Qualitative Information | | 1 |  | |
| 2 |  | |
| 3 |  | |
| 4 |  | |
| Other Comments | | 1 |  | |
| 2 |  | |
| 3 |  | |
| 4 |  | |

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| Market Segment | Not applicable |

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| **Comments Received** | |
| Comment Author | **Comment Summary** |
| WMS 041111 | Endorsed NPRR344 as submitted. |

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| Proposed Protocol Language Revision |

3.14.1.16 Reporting Actual Eligible Costs

(1) The RMR Unit owner shall provide ERCOT with actual fuel costs on a monthly basis for the RMR Unit in a level of detail sufficient for ERCOT to verify that all fuel costs are actual and appropriate. The estimated fuel payments may include a fuel adder to better approximate expected actual fuel costs. The fuel adder shall represent the difference between the forecasted average actual future fuel price paid and the forecasted average of the relevant index price (FIP, FOP or solid fuel) over the RMR contract period. The fuel adder must also include the forecasted cost of transporting, delivering and fuel imbalances to the Resource. QSEs must provide to ERCOT supporting documentation indicating how the fuel adder was determined. ERCOT shall perform a true-up of the estimated fuel costs using the submitted and verified actual fuel costs for the RMR Unit. Actual cost data must be submitted on time by the Generation Entity for the RMR Unit and then verified by ERCOT so the actual cost data can be reflected in the True-Up Settlement Statement. To be considered timely for the final, actual cost data for month ‘x’ must be submitted by the 20th of the month following month ‘x.’ To be considered timely for the true-up, actual cost data for month ‘x’ must be submitted 30 days prior to the publishing date of the True-Up Settlement Statement for the first day in month ‘x.’ Any deviation in filing actual cost data in accordance with this calendar must be requested of ERCOT, by the QSE representing an RMR Unit. Such request for deviation shall contain the reason for the inability to meet the calendar and an expected date that the cost data will be provided to ERCOT. At its discretion ERCOT may choose to honor such a request. ERCOT shall post on the MIS Public Area any such request and response thereto. In the event that actual cost data is not submitted in accordance with the calendar or approved deviation for the true-up, then the cost for the portion of Eligible Cost that has not been submitted is deemed to be zero.

(2) Actual fuel costs must be appropriate actual costs attributable to ERCOT’s scheduling and/or deployment of the RMR Unit. Actual fuel costs may include cost of fuel (including the cost of exceeding swing gas contract limits, additional gas demand costs set by fuel supply, or transportation contracts); demand fees, imbalance penalties, transportation charges, and cash out premiums.

6.6.6.2 RMR Payment for Energy

(1) Payment for energy on the Initial Settlement and settlements executed before true-up and before actual cost data is submitted must be calculated using the estimated input/output curve and startup fuel as specified in the RMR Agreement, the actual energy produced and the FIP. The payment for energy for all other settlements must be based on actual fuel costs for the RMR Unit. The payment for energy for each hour is calculated as follows:

RMREAMT *q, r*= (-1) \* ((FIP + RMRCEFA *q, r*) \* RMRSUFQ *q, r* / RMRH *q, r*) \* RMRALLOCFLAG *q, r* + (((FIP + RMRCEFA *q, r*) \* RMRHR *q, r, i* + RMRVCC *q, r*) \* RTMG *q, r, i*)

The above variables are defined as follows:

| Variable | Unit | Definition |
| --- | --- | --- |
| RMREAMT q, r | $ | *Reliability Must-Run Energy Amount per QSE per Resource by hour*—The energy payment to QSE *q* for RMR Unit *r*, for the hour. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| FIP | $/MMBtu | *Fuel Index Price*—The FIP for the Operating Day. |
| RMRSUFQ q, r | MMBtu | *Reliability Must-Run Startup Fuel Quantity per QSE per Resource*⎯The Estimated Start Up Fuel specified in the RMR Agreement for RMR Unit *r* represented by QSE *q*. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMRH q, r,h | hour | *Reliability Must-Run Hours*—The number of hours during which RMR Unit *r* represented by QSE *q* is instructed On-Line for the Operating Day. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMRALLOCFLAG q, r | none | *Reliability Must-Run Startup Flag per QSE per Resource by hour*—The number that indicates whether or not the startup fuel cost of RMR Unit *r* represented by QSE *q* is allocated to the hour. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. The startup fuel cost will be allocated equally to all contiguous intervals for which there is an eligible start. The RMRALLOCFLAG q, r value is 1 if the startup fuel cost is allocated; otherwise, its value is 0.  The RMRALLOCFLAG q, r for eligibility is determined in Sections 5.6.2, RUC Startup Cost Eligibility, and 5.6.3, Forced Outage of a RUC-Committed Resource, for start-up payments and commitments in either the Reliability Unit Commitment (RUC) or DAM. |
| RMRHR q, r, i | MMBtu /MWh | *Reliability Must-Run Heat Rate per QSE per Resource by Settlement Interval by hour*—The multiplier determined based on the input/output curve and the Real-Time generation of RMR Unit *r* represented by QSE *q*, for the 15-minute Settlement Interval *i* in the hour. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMRVCC q, r | $/MWh | *Reliability Must-Run Variable Cost Component per QSE per Resource*—The monthly cost component that is used to adjust the energy cost calculation to reflect the actual fuel costs of RMR Unit *r* represented by QSE *q*. The value is initially set to zero. For resettlements, see item (2) below. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RTMG q, r, i, | MWh | *Real-Time Metered Generation per QSE per Resource by Settlement Interval by hour*—The Real-Time energy from RMR Unit *r* represented by QSE *q*, for the 15-minute Settlement Interval *i* in the hour *h*. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMRCEFA q, r | $/MMBtu | *Reliability Must-Run Contractual Estimated Fuel Adder*—The Estimated Fuel Adder that is contractually agreed upon in Section 22, Attachment B, Standard Form Reliability Must-Run Agreement. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. The fuel adder will be subsequently trued up to reflect actual fuel costs as set forth in item (1) above. |
| *q* | none | A QSE. |
| *r* | none | An RMR Unit. |
| *i* | none | A 15-minute Settlement Interval. |

(2) If the RMR actual fuel cost is filed in accordance with the timeline in these Protocols, the monthly RMR variable cost component is calculated for the subsequent resettlements as follows:

RMRVCC *q, r*= (RMRMFCOST *q, r* + RMREAMT *q, r, f, h*) /

(RTMG *q, r, i*)

The above variables are defined as follows:

| Variable | Unit | Definition |
| --- | --- | --- |
| RMRVCC q, r | $/MWh | *Reliability Must-Run Variable Cost Component per QSE per Resource*—The monthly cost component that is used to adjust the energy cost calculation to reflect the actual fuel costs of RMR Unit *r* represented by QSE *q*. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMRMFCOST q, r | $ | *Reliability Must-Run Monthly actual Fuel Cost per QSE per Resource*—The monthly actual fuel cost of RMR Unit *r* represented by QSE *q*, for the month. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RTMG q, r, i | MWh | *Real-Time Metered Generation per QSE per Resource by Settlement Interval*—The Real-Time energy from RMR Unit *r* represented by QSE *q* for the 15-minute Settlement Interval *i*. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| RMREAMT q, r, f, h | $ | *Reliability Must-Run Energy Amount per QSE per Resource by hour*—The energy payment to QSE *q* for RMR Unit *r*, for the hour *h,* from the former Settlement Statement *f*. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| *q* | none | A QSE. |
| *r* | none | An RMR Unit. |
| *h* | none | An hour in the month. |
| *i* | none | A 15-minute Settlement Interval in the month. |
| *f* | none | Amount from former settlement run. |

(3) The total of the payments for energy to each QSE for all RMR Units represented by this QSE for a given hour is calculated as follows:

RMREAMTQSETOT *q* = RMREAMT *q, r*

The above variables are defined as follows:

|  |  |  |
| --- | --- | --- |
| Variable | Unit | Definition |
| RMREAMTQSETOT q | $ | *Reliability Must-Run Energy Amount QSE Total per QSE*⎯The total of the energy payments to QSE *q* for all RMR Units represented by this QSE for the hour. |
| RMREAMT q, r | $ | *Reliability Must-Run Energy Amount per QSE per Resource by hour*—The energy payment to QSE *q* for RMR Unit *r*, for the hour. Where for a Combined Cycle Train, the Resource *r* is the Combined Cycle Train. |
| *q* | none | A QSE. |
| *r* | none | An RMR Unit. |