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| NPRR Number | [1229](https://www.ercot.com/mktrules/issues/NPRR1229) | NPRR Title | Real-Time Constraint Management Plan Energy Payment |
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| Date | | September 20, 2024 | |
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| Market Segment | | Cooperative | |

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| Comments |

Based upon discussion at WMWG and WMS, STEC submits these comments to address the items ERCOT sought for clarification. Generally, the intent of the Nodal Protocol Revision Request (NPRR) was to address an issue that arose following ERCOT actions taken to manage the reliability in summer 2023. As a result of the action by ERCOT to maintain reliability, a Resource in STEC’s Qualified Scheduling Entity (QSE) was placed in a condition where a simple operation of a transmission line would trip the Resource. To accommodate the increased risk placed upon a single entity and in consideration of the taking occurring, STEC sponsored NPRR1229. The NPRR addressed a new need for the market but not new concepts for the Protocols. This is a new application for a make-whole payment.

Operational Concerns:

NPRR1229 was not intended to reduce the ability of ERCOT to address reliability needs as they arise. The application included in the language is narrower in scope in our revisions. The dispute process would provide the opportunity for Generation Resource to present the facts for ERCOT to review for confirmation of the specific scenario the language includes. The ability of ERCOT to instruct a Resource Offline or to instruct a Generation Resources breaker open for poor performance is not hindered here. These situations would not meet the criteria for a Constraint Management Plan (CMP) Payment.

Other Concerns:

ERCOT has noted that a Generation Resource could experience a better price under a CMP than without the CMP or Verbal Dispatch Instruction (VDI). While this could be true, relatively higher prices are fleeting. The focus of our NPRR is to commensurate the risk borne by a Generation Resource. Higher prices could occur pending the grid conditions, but prices are fleeting and that would only be part of taking on this risk. Plus, there should be consideration for the taking of a Generation Resource for the benefit of the rest.

Cost-related Concerns:

The NPRR includes consideration for costs limited to such that are directly related to the trip that occurred. The operation of a breaker would be identified, and the subsequent costs related to the trip should be limited in nature due to the protection systems included on a Generation Resource. The costs associated with poor maintenance decisions would not be the result of a line operation.

The NPRR includes similar payments as in HDL override Settlements. The application would be similar for recovering costs due to a bilateral contract or recovering incremental costs as a Resource trying to serve its Load located in the same QSE. Inclusion of opportunity costs is available when these previously mentioned situations do not exist. The intent is not for recovery of both contractual losses or incremental costs and lost opportunity costs simultaneously. The comments below include a cap on the number of Operating Days available for recovery at ten Operating Days rather than an approach that leaves the timing open-ended based upon the Resource returning from outage.

The NPRR includes the simplest approach of calculating costs as if the Generation Resource was operating at High Sustained Limit (HSL) for ease of calculation. There is the capacity opponent to a Resource which is overlooked if an attempt is made to solely paid on energy. E.g. – a Resource operator can sell its full Resource capacity or the ability to hedge the full capacity of its Resource when it is available. The energy sold is just mechanics of the market. A bilateral contract would reveal how much of a Resource would be sold per the agreement.

Settlement Concerns:

The timing for the QSE and ERCOT was set to match that of the HDL override dispute process. Given the even more one-off nature of this specific event, a broader time frame for dispute and review by ERCOT is prudent here.

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| Revised Cover Page Language |

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| Nodal Protocol Sections Requiring Revision | 6.6.3.9, Real-Time Constraint Management Plan Energy Payment (new)  6.6.3.10, Real-Time Constraint Management Plan Energy Charge (new)  6.6.3.11, Miscellaneous Invoice for Payments and Charges for a Real-Time Constraint Management Plan (new) |

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| Revised Proposed Protocol Language |

**6.6.3.9 Real-Time Constraint Management Plan Energy Payment**

(1) If a Generation Resource trips Off-Line from a transmission equipment operation that would have normally not tripped the unit Off-Line but for the activation of a Constraint Management Plan (CMP) which subjects a Generation Resource to N-1 contingency that could trip the Generation Resource Off-Line or ERCOT issues a Verbal Dispatch Instruction (VDI) to a Generation Resource or its Transmission Operator to operate its equipment to produce the same effect, the QSE may be eligible for a Real-Time Constraint Management Plan Energy Payment, as calculated below, upon providing documented proof of that loss. The Generation Resource shall not be eligible for this payment if ERCOT must issue a Verbal Dispatch Instruction to open the Generation Resource’s breaker due to improperly following ERCOT instructions without the Generation Resource notifying ERCOT that doing so would harm the Resource. In order to qualify for this payment the QSE must:

(a) Have impacted the Generation Resource On-line with breaker closed;

(b) The Generation Resource tripped Off-Line from a transmission equipment operation in an N-1 contingency following activation of a CMP directly impacting transmission equipment connected to the Generation Resource or an equivalent VDI issued by ERCOT to the Generation Resource or its Transmission Operator to operate equipment to produce the same effect;; and

(c) File a timely Settlement and billing dispute, including the following items:

(i) An attestation signed by an officer or executive with authority to bind the QSE;

(ii) The dollar amount and calculation of the financial loss by Settlement Interval, including:

(A) Financial losses associated with:

(1) QSEs representing Generation Resources in their portfolio with the outage for a Resource with a bilateral contract to sell energy at its Resource Node; or

(2) Incremental costs incurred by a QSE in the Real-Time Market (RTM) to serve its Load if the outage for the Resource is in the same QSE portfolio as the Load, causes the QSE to be short energy compared to its Load for the intervals affected by the outage; or

(3) Opportunity costs in the Real-Time Market (RTM) if the Resource does not meet items (1) or (2) above; and

(B) Actual costs incurred to repair the plant equipment directly attributable to the Forced Outage caused by the CMP activation or equivalent VDI. Such costs include, but are not limited to:

(1) Costs associated with a Forced Outage if the result of the trip is due to the implementation of the CMP or equivalent VDI;

(2) Additional staff or contractor time as a result of the Forced Outage;

(3) Costs of equipment rental (including but not limited to cranes, manlifts, welding machines, etc.);

(4) Costs of facility rentals and other incidental incremental costs incurred by the Resource or its QSE created by the Forced Outage; and

(5) The cost of materials to be repaired that is a direct result of the Forced Outage.

(C) Costs covered under paragraph (B) above do not include:

(1) Capital expenditures.

(iii) An explanation of the nature of the loss and how it was attributable to the CMP or equivalent VDI issued by ERCOT; and

(iv) Sufficient documentation to support the QSE’s calculation of the amount of the financial loss.

(2) The time frame to be included in CMP Energy Payment calculation will start at the Settlement Interval of initial trip and will conclude in the Settlement Interval at the soonest of:

(a) The Generation Resource is On-Line and available for Dispatch as per telemetry;

(b) The first hour of availability for ERCOT Dispatch (e.g. Resource Status other than OUT) as per the COP; or

(c) Ten Operating Days following the first Operating Day after the Resource trips Off-Line.

(3) ERCOT may request additional supporting documentation or explanation with respect to the submitted materials within 60 Business Days of receipt. Additional information requested by ERCOT must be provided by the QSE within 15 Business Days of ERCOT’s request. ERCOT will provide Notice of its acceptance or rejection of the claim for the Real-Time Constraint Management Plan Energy Payment within 15 Business Days of the updated submission.

(4) The Startup costs available for the Generation Resource will be limited to the lesser of:

(a) The most recent valid Day-Ahead Startup Offer received for the Generation Resource; or

(b) The Day-Ahead Startup Cap for the Resource’s Category Startup Offer Generic Cap unless ERCOT has approved verifiable unit-specific Startup Costs for the Resource.

(5) The payment shall be calculated as follows whereas the similar variables included herein shall have the same meaning as defined in Section 5.6.5.2, RUC Make-Whole Payment and RUC Clawback Charge for Resources, and Section 5.7.1.1, RUC Guarantee:

CMPEAMT = (-1){(Max (0, (RTSPP*p* – MOC*q, r, h*)) \* HSL*q, r, h* \* (¼)) + SUPR*q, p, r* + CMPLOAL*q, r, p, i*}

The above variables are defined as follows:

| **Variable** | **Unit** | **Definition** |
| --- | --- | --- |
| CMPLOAL *q, r, p, i* | $ | *Constraint Management Plan attested losses*—The financial loss to the QSE due trip Off-Line of Resource following implementation of CMP or equivalent VDI as attested by the QSE in accordance with paragraph (1)(d) above. |
| CMPEAMT *q, r, p, i* | $ | *Constraint Management Plan energy amount per QSE per Generation Resource*—The payment to QSE *q* during eligible hours of a trip offline from an ERCOT-issued CMP or equivalent VDI for Generation Resource *r* at Settlement Point *p* for the 15-minute Settlement Interval *i*. For a combined cycle Resource, *r* is a Combined Cycle Train. |
| *q* | None | A QSE. |
| *r* | None | A Generation Resource. |
| *p* | None | A Resource Node Settlement Point. |
| *i* | None | A 15-minute Settlement Interval. |

(7) The total compensation to each QSE for a trip offline due to ERCOT CMP or equivalent VDI for the 15-minute Settlement Interval is calculated as follows:

**CMPEAMTQSETOT *q, i* = {CMPEAMT *q, r, p, i*} / (intervals of outage)**

The above variables are defined as follows:

| **Variable** | **Unit** | **Definition** |
| --- | --- | --- |
| CMPEAMT *q, r, p, i* | $ | *Constraint Management Plan energy amount per QSE per Generation Resource*—The payment to QSE *q* for trip offline from an ERCOT-issued CMP or equivalent VDI for Generation Resource *r* at Settlement Point *p* for the 15-minute Settlement Interval *i*. For a combined cycle Resource, *r* is a Combined Cycle Train. |
| CMPEAMTQSETOT*q, i* | $ | *Constraint Management Plan energy amount QSE total per QSE*—The total of the energy payments to QSE *q* as compensation for HDL overrides for this QSE for the 15-minute Settlement Interval *i*. |
| *q* | none | A QSE. |
| *r* | none | A Generation Resource. |
| *p* | none | A Resource Node Settlement Point. |
| *i* | none | A 15-minute Settlement Interval. |

6.6.3.10 Real-Time Constraint Management Plan Energy Charge

(1) ERCOT shall allocate to QSEs on an LRS basis the total amount of the payment specified in Section 6.6.3.9, Real-Time Constraint Management Plan Energy Payment. The charge to each QSE for a given 15-minute Settlement Interval is calculated as follows:

LACMPEAMT *q, i*  = (-1) \* CMPEAMTTOT \* LRS *q, i*

Where:

CMPEAMTTOT *i* =  CMPEAMTQSETOT *q, i*

The above variables are defined as follows:

| **Variable** | **Unit** | **Definition** |
| --- | --- | --- |
| LACMPEAMT *q* | $ | *Load-Allocated Constraint Management Plan energy amount per QSE*—The charge to QSE *q* for Constraint Management Plan energy payment as identified in 6.6.3.9, for the 15-minute Settlement Interval. |
| CMPEAMTTOT *i* | $ | *Constraint Management Plan energy amount total*—The total of payments to all QSEs Constraint Management Plan energy payments, for the 15-minute Settlement Interval *i*. |
| CMPEAMTQSETOT *q, i* | $ | *Constraint Management Plan energy amount QSE total per QSE*—The total of the energy payments to QSE *q* as compensation for a Constraint Management Plan energy payment for this QSE for the 15-minute Settlement Interval *i*. |
| LRS *q, i* | none | *The Load Ratio Share* calculated for QSE *q* for the 15-minute Settlement Interval *i*. See Section 6.6.2.2, QSE Load Ratio Share for a 15-Minute Settlement Interval. |
| *q* | none | A QSE. |
| *i* | none | A 15-minute Settlement Interval. |

6.6.3.11 Miscellaneous Invoice for Payments and Charges for a Real-Time Constraint Management Plan

(1) ERCOT shall issue one-time monthly miscellaneous Invoices using the most recent available Settlement data at the time the Invoices were issued.

(2) ERCOT shall issue miscellaneous Invoices on a monthly basis to QSEs representing the Resource that has received a Constraint Management Plan payment, as described in Section 6.6.3.9, Real-Time Constraint Management Plan Energy Payment.

(3) ERCOT shall issue miscellaneous Invoices on a monthly basis and allocate costs to the impacted QSEs as described in Section 6.6.3.10, Real-Time Constraint Management Plan Energy Charge.

(4) ERCOT shall issue a Market Notice in conjunction with the issuance of miscellaneous Invoices for payments or charges for Real-Time Constraint Management Plan Settlement.

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| ***[NPRR1229: Delete Section 6.6.3.11 above upon system implementation.]*** |