

Item 4.1: TAC Report regarding Non-Unanimous and Other Selected Revision Requests Recommended by TAC for Board Approval – REVISED

Caitlin Smith 2023 Technical Advisory Committee (TAC) Vice Chair

Reliability and Markets Committee Meeting

ERCOT Public June 19, 2023

Slide 3 revised 6/15/2023 to correct Purpose for NPRR1143

Committee Request

Why this is being presented today:

To present the Technical Advisory Committee (TAC) recommendations on the following Revision Requests that were recommended by TAC for Board approval, for which the R&M Committee is expected to vote on a recommendation to the Board:

- NPRR1143, Provide ERCOT Flexibility to Determine When ESRs May Charge During an EEA Level 3
 - Recommended for approval by TAC with one opposing vote
- NPRR1169, Expansion of Generation Resources Qualified to Provide Firm Fuel Supply Service in Phase 2 of the Service – URGENT
 - Recommended for approval by TAC with no opposing votes
 - ERCOT comments posted 6/12/23 proposing an alternative to TAC's recommendation
- VCMRR031, Clarification Related to Variable Costs in Fuel Adders
 - Recommended for approval by TAC with two opposing votes



NPRR1143, Provide ERCOT Flexibility to Determine When ESRs May Charge During an EEA Level 3

Purpose (ERCOT)	This Nodal Protocol Revision Request (NPRR) allows ERCOT the ability to decide when Energy Storage Resources (ESRs) may charge during an Energy Emergency Alert (EEA) Level 3.
TAC Vote	On 5/23/23, TAC voted to recommend approval of NPRR1143 as recommended by PRS in the 5/10/23 PRS Report as amended by the 5/19/23 ERCOT comments; and the 5/22/23 Revised Impact Analysis. There was one opposing vote from the Cooperative (STEC) Market Segment and six abstentions from the Consumer (2) (Air Liquide, CMC Steel), Cooperative (3) (GSEC, LCRA, PEC), and Independent Generator (Luminant) Market Segments.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1143 and believes that the ability to decide when ESRs may charge during an EEA Level 3 has the positive impact of aiding in building back reserves, restoring firm Load and recovering from the EEA Level 3 event.
Effective Date/Priority	August 1, 2023
ERCOT Impact	No impact
Business Case Highlights	In an extended emergency event like February 2021 Winter Storm Uri, it is possible that there may be times when grid conditions are conducive to, and may benefit from, allowing ESRs to charge. This NPRR permits ERCOT to provide charging instructions to an ESR during an EEA Level 3 if ERCOT determines operating conditions are suitable for such an action. This NPRR does not change how ERCOT will instruct ESRs to suspend or resume charging during an EEA Level 3. Specifically, during EEA Level 3, ERCOT will communicate any suspend charging instructions to ESRs via Security-Constrained Economic Dispatch (SCED) Base Point or manual Dispatch Instruction, if necessary; and communicate any resume charging instructions to ESRs via SCED Base Point based on the Real-Time Market (RTM) Energy Bids submitted by ESRs. During EEA Level 3, an ESR is required to suspend charging unless it is providing Primary Frequency Response or responding to a Load Frequency Control (LFC) Regulation Down Service (Reg-Down) instruction or has received a charging instruction via SCED Base Point. If ERCOT determines that operating conditions are suitable for an ESR to charge during an EEA Level 3, then it is acceptable for ESRs that have received a non-zero charging Base Point instruction to carry other Ancillary Services such as Regulation Up Service (Reg-Up), Responsive Reserve (RRS) service and Non-Spinning Reserve (Non-Spin) while the ESR is charging.



NPRR1169, Expansion of Generation Resources Qualified to Provide Firm Fuel Supply Service in Phase 2 of the Service – URGENT

Purpose (ERCOT)	This Nodal Protocol Revision Request (NPRR) expands the qualifications by which a Generation Resource may provide the reliability service, FFSS. FFSS was developed in 2022 consistent with directives from the Legislature (provided in Section 18 of Senate Bill 3, 87(R) that are now found in PURA 39.159(c)(2), requiring ancillary or reliability services to address reliability during extreme cold-weather conditions) and the PUCT (see e.g. PUCT Project No. 52373, Approval of Blueprint for Wholesale Electric Market Design and Directives to ERCOT (Jan. 13, 2022)), ordering ERCOT to develop a firm-fuel product that provides additional grid reliability and resiliency during extreme cold weather and compensates generation resources that meet a higher resiliency standard.
TAC Vote	On 5/23/23, TAC voted to recommend approval of NPRR1169 as recommended by PRS in the 5/10/23 PRS Report as amended by the 5/22/23 Calpine comments as revised by TAC. There was one abstention from the Independent Generator (Luminant) Market Segment.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1169 and believes the market impact for NPRR1169 expands the pool of Generation Resources that qualify to provide FFSS while balancing the interests of fostering more competition in offers and increasing the amount of capacity that can be procured; and maintaining requirements designed to mitigate failure risks and result in a high level of reliability. While ERCOT sponsored and supports NPRR1169, it does not support the TAC recommendation in the 5/24/23 TAC Report.
Effective Date/Priority	August 1, 2023
ERCOT Impact	ERCOT business processes will be updated
Business Case Highlights	FFSS is a product designed to assist in Generation Resource reliability in the event of a natural gas curtailment or other fuel-supply disruption. The expansion of the pool of Generation Resources that qualify to provide the service that is proposed in this NPRR balances the interests of: fostering more competition in offers and increasing the amount of capacity that can be procured; and maintaining requirements designed to mitigate failure risks and result in a high level of reliability.



Item 4.1 ERCOT Public

VCMRR031, Clarification Related to Variable Costs in Fuel Adders

Purpose (ERCOT)	This VCMRR: Defines variable costs and clarifies that all cost components used to calculate a Filing Entity's fuel adder should also be based on variable costs; Removes the minimum requirements fee cost category from the examples of cost categories that may be included in the fuel adder; and Changes the review timeline detailed in paragraph (3) of Section 3.4 to give ERCOT the ability to review and follow up on more complex cost submissions.
TAC Vote	On 5/23/23, TAC voted to recommend approval of VCMRR031 as recommended by WMS in the 5/3/23 WMS Report. There were two opposing votes from the Independent Generator (Luminant, Calpine) Market Segment and 10 abstentions from the Cooperative (4) (GSEC, LCRA, PEC, STEC), Independent Generator (2) (Jupiter Power, ENGIE), and Municipal (4) (DME, CPS Energy, Austin Energy, GP&L) Market Segments.
ERCOT Market Impact Statement	ERCOT Staff has reviewed VCMRR031 and believes the market impact for VCMRR031 will align the Verifiable Cost Manual with the Protocols by removing references to a minimum requirements fee and by clarifying that all costs used to calculate fuel adders must be variable.
Effective Date/Priority	August 1, 2023
ERCOT Impact	No impact
Business Case Highlights	ERCOT has determined that a conflict exists between the Protocols and the Verifiable Cost Manual to the extent the Verifiable Cost Manual allows fixed costs to be used when calculating fuel adders. Paragraph (5)(a) of Protocol Section 5.6.1 states that unit-specific verifiable costs may not include fixed costs, which are defined in that provision as "any cost that is incurred regardless of whether the unit is deployed or not." Verifiable Cost Manual Sections 3.4 and 3.5 purport to allow minimum requirements fees to be included in the fuel adder. The fee is charged whether or not the total pipeline capacity is used and is therefore a fixed cost. Additionally, Section 3.4 includes a list of cost categories used in calculating the actual fuel adder such as storage and transportation fees, but does not clearly state that all costs submitted in those categories must be variable. This VCMRR aligns the Verifiable Cost Manual with the Protocols by removing references to a minimum requirements fee and by clarifying that all costs used to calculate fuel adders must be variable. Although Protocol Sections 5.6.1.1 and 5.6.1.2 both contemplate that verifiable startup and minimum energy costs may include a "fuel adder that compensates for the transportation and purchasing of spot fuel as described in the Verifiable Cost Manual," that language does not affect the application of the requirement in Protocol Section 5.6.1.1 and 5.6.1.2 to provide that a fuel adder is permitted, but only if it is limited to recovery of variable costs.



Item 4.1