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June 26, 2023

Public Utility Commission of Texas
Interim Chairman, Kathleen Jackson
Commissioner Peter Lake
Commissioner Will McAdams
Commissioner Lori Cobos
Commissioner Jimmy Glotfelty
1701 N. Congress Avenue
Austin, TX 78711

Re: PUC Project No. 54444, *Calendar Year 2023 Reports of the Electric Reliability Council of Texas*
PUC Project No. 55156, *Implementation Activities 88th Legislature*

Dear Chairman and Commissioners:

Attached is a presentation for the Public Utility Commission of Texas's (Commission) consideration that summarizes two potential implementation options for Dispatchable Reliability Reserve Service (DRRS). House Bill (HB) 1500 amended Public Utility Regulatory Act (PURA) § 39.159 to require that ERCOT develop and implement an ancillary services program to procure DRRS.¹ The statutory deadline for DRRS program implementation is December 1, 2024.² PURA § 39.159(d) requires that DRRS be procured on a day-ahead and real-time basis, that the quantity of services be determined based on historical variations in generation availability, and that Reliability Unit Commitment (RUC) be reduced by the amount of DRRS procured. Furthermore, Resources participating in DRRS must be capable of running at least four hours at their High Sustained Limit (HSL), be online within two hours of instruction, and have dispatch flexibility to address inter-hour operational challenges. ERCOT has been evaluating options for development of a DRRS product that comports with these statutory requirements.

Based on its evaluation, ERCOT has identified two potential options to implement DRRS—one that can be implemented on an expedited timeframe by modifying existing products ("Option A") and another that could be developed over a more extended timeframe that would result in an entirely new product ("Option B"). Option A would entail the repurposing of the current Non-Spinning Reserve (Non-Spin) ancillary service to serve as the new DRRS by allowing provision by longer lead-time Resources (Non-Spin currently requires participating Resources to be online or interruptible within 30 minutes). ERCOT would also procure more ERCOT Contingency Reserve Service (ECRS) ancillary services to cover the gap created by the modified Non-Spin's longer lead time. Go-live for Option A could be achieved by November 2024. Option A is advantageous because it is the quickest means to implement DRRS while also minimizing the

¹ Tex. H.B. 1500, 88th Leg., R.S. (2023) (§ 22 added Public Utility Regulatory Act, TEX. UTIL. CODE § 39.159(d) & (c) (PURA)).

² *Id.* at § 51.

impact on other priority projects, such as Real-Time Co-optimization, the Performance Credit Mechanism, the Energy Storage Resource single model, and other initiatives. The drawbacks of Option A include an increased reliance on the recently launched ECRS product with which ERCOT has relatively less experience, the need to further consider how best to address the lack of overlap between the 2-hour ECRS duration requirements and the 2-hour DRRS lead time, and the general loss of incentives for Resources with a 30-minute lead time.

Under Option B, ERCOT would create a new ancillary service for off-line, dispatchable Resources that can be available within two hours and are able to run for at least four hours at their HSL. As further detailed in the development timeline on slide 4, go-live could be achieved by the third quarter of 2025. The advantages of Option B include that it would minimize impacts to the structure of existing Ancillary Services, retain incentives for existing 30-minute lead-time Resources via Non-Spin, and ensure that all Resources providing the new product have comparable requirements, are deployed equitably, and receive equivalent compensation. Note that, for both Options A and B, DRRS must be an off-line product in order to mitigate the need for RUC, as required by section 39.159(d)(3), as amended by HB 1500. The primary disadvantage of Option B is that, due to the complexity of developing a new standalone product, it would not meet the statutory deadline of December 1, 2024 even if it is given top priority over other projects. Additionally, Option B would require Market Participant system changes and market readiness testing, it would be more complex than Option A for dispatch by the control room, and it would have a significant impact on other high-priority projects.

I will be available at the June 29, 2023 Open Meeting to present these alternatives and to answer any questions that you may have. Given the amount of time anticipated to be necessary for development of DRRS under either option and the additional time that would be required for compliance with new procedural requirements governing direction to ERCOT that will take effect on September 1,³ ERCOT respectfully requests that the Commission direct ERCOT as soon as practicable to implement DRRS consistent with the requirements of HB 1500. If the Commission provides such direction at this Open Meeting, ERCOT would intend to pursue Board approval of the revision requests to create the DRRS program and submit them for Commission approval in November 2023.

ERCOT would be pleased to provide any additional information or address any questions the Commissioners may have regarding this issue.

Respectfully submitted,

/s/ Kenan Ögelman

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³ H.B. 1500's requirement that Commission direction to ERCOT on matters involving new costs or fees must be provided via a contested case or rulemaking takes effect on September 1, 2023. See Tex. H.B. 1500 at § 17 (adding PURA § 39.1514(a-1)); § 56 (establishing effective date for H.B. 1500).

Dispatchable Reliability Reserve Service (DRRS): Implementation Options

Kenan Ögelman

Vice President Commercial Operations

PUC Project No. 55156, *Implementation Activities*
88th Legislature

PUC Open Meeting
June 29, 2023



HB1500 Dispatchable Reliability Reserve Service Requirements

- Day Ahead and Real-Time procurement
- Quantity based on historical variations in generation availability
- Run at least 4 hours at High Sustained Limit (HSL)
- Online within 2 hours of instruction
- Dispatch flexibility to address inter-hour operational challenges
- Reduce Reliability Unit Commitment (RUC) by the amount of DRRS procured
 - Note: Since the ability to RUC is necessary to meet several NERC Reliability Standards, this requirement can only be achieved to the extent that RUCs are not needed to cover load and reserve obligations

Option A: Repurpose or augment the current Non-Spin to allow participation by longer lead time Resources and buy more ECRS

Revise current Non-Spin to become DRRS by allowing longer lead-time resources to provide the service and buy more ECRS to cover the risk of the longer lead time needed to deploy DRRS.



• Pros

- Quickest way to implement DRRS with lowest impact to other priority projects (Real-Time Co-optimization, State of Charge (SOC) modeling/monitoring, Energy Storage Resource (ESR) single model, Performance Credit Mechanism (PCM), etc.)
- DRRS must be an off-line product to help in mitigating the need for RUCs

• Cons

- Increases reliance on ECRS
 - Limited operational and commercial experience and questions as to whether sufficient ECRS offers will be available
 - Creates a need to increment our use of ECRS to cover what Non-Spin is utilized for today
- Needs further consideration on how to address lack of overlap between 2-hour ECRS duration requirements and 2-hour DRRS lead time
- General loss of incentives for 30-minute Resources, but some Resources may be able to migrate to ECRS. No guaranteed incentive for existing Non-Spin providers to respond as quickly as they do today.

Option B: New Ancillary Service Implemented Like ECRS

Create a new Ancillary Service for off-line, dispatchable Resources that can be available within 2 hours and able to run for at least 4 hours at their High Sustained Limit (HSL). Current Non-Spin design is retained.



• Pros

- Minimizes impacts to the structure of existing Ancillary Services
 - Would change methodologies and quantities for Non-Spin
- Retains requirements and incentives for existing Non-Spin providers to respond within 30 minutes
- DRRS must be an off-line product to help in mitigating the need for RUCs
- All Resources providing the new product have comparable requirements, are deployed equitably, and receive equivalent compensation

• Cons

- Most complex to implement as a stand-alone effort
 - Significant impact to other high priority projects
 - Unlikely to meet bill deadline, even if given top priority over other projects
 - Involves Market Participant system changes and Market Readiness testing
- More complex from a control room / dispatch process perspective than Option A

Key Takeaway: Would not meet the legislative timeline and has greater impacts to other high priority projects, but creates a new Ancillary Service with clear distinction from the other Ancillary Services

Next Steps

- Discussions with PUC and Stakeholders – June to August 2023
- Protocol Development – August 2023
- Stakeholder Protocol Process – August to October 2023
- Board Recommendation – October 2023
- PUC Approval – November 2023