



Filing Receipt

Filing Date - 2023-10-06 11:05:00 AM

Control Number - 55250

Item Number - 18

PROJECT NO. 55250

**TRANSMISSION AND DISTRIBUTION § PUBLIC UTILITY COMMISSION
SYSTEM RESILIENCY PLANS § OF TEXAS**

HUNT ENERGY NETWORK, L.L.C.'S COMMENTS ON PROPOSED RULE §25.62

Executive Summary

- The concept of resiliency is broader than simply investment in regulatory infrastructure. Resiliency should consider the long-term topography of the entire power delivery system. TDSP resiliency plans should therefore include measures that encourage and support competitive investment in resiliency.
- Distributed Energy Resources (DERs) are an essential component of a resilient distribution grid. The TDSP's resiliency plans should incorporate distribution grid enhancements that allow for greater interconnection and incorporation of DERs and microgrids to improve resiliency.

HEN's Recommended Changes to Proposed Rule §25.62

- The Resiliency Measures listed in §25.62(c)(1) should be expanded to include two new measures:
 - segmentation of distribution facilities for purposes of managing load shed and effective utilization of distributed energy resources; and
 - streamlined, expedited interconnection of competitive supply-side and demand-side resources.
- The Contents of the Resiliency Plan in §25.62(c)(2)(A) should be amended as follows:
 - (v) The resiliency plan must explain the selection of each measure over any reasonable and readily-identifiable alternatives, including those that could be provided by non-regulated, competitive entities. The resiliency plan must contain sufficient analysis and evidence, such as cost or performance comparisons, to support the selection of each measure; and
 - (vi) The resiliency plan must include an analysis of the potential integration of various demand-side solutions, including distributed energy resources and microgrid configurations and develop non-discriminatory metrics that would allow market participants to determine system adequacy for the interconnection of demand-side energy resilience solutions.
- The Commission's review of the resiliency plan in §25.62(d)(4) should include an analysis of the extent to which the plan incorporates the statutory policy set forth in PURA § 39.001(d) to authorize competitive rather than regulatory methods to the greatest extent feasible.
- Reporting requirements in §25.62(g)(1) should be expanded to include a description of the resiliency plan measures scheduled or completed that will remove barriers to entry and accelerate interconnection of DERs, including microgrid configurations, or other competitive resiliency solutions.

PROJECT NO. 55250

**TRANSMISSION AND DISTRIBUTION §
SYSTEM RESILIENCY PLANS §**

**PUBLIC UTILITY COMMISSION
OF TEXAS**

HUNT ENERGY NETWORK, L.L.C.'S COMMENTS ON PROPOSED RULE §25.62

Hunt Energy Network, L.L.C. ("HEN") submits these comments to the Public Utility Commission of Texas ("PUCT" or "Commission") regarding proposed rule §25.62 concerning the implementation of the transmission and distribution utility ("TDSP") system resiliency plans. Commission Staff requested comments by October 6, 2023, and therefore, these comments are timely filed.

HEN appreciates the opportunity to submit these comments and looks forward to working with the Commission and other stakeholders to enhance the resilience of our grid. This is truly a once-in-a-generation opportunity to shape Texas' future economic development.

I. INTRODUCTION

Texans are incredibly resilient. In the face of extreme heat and cold, drought, wildfires, tornadoes, hurricanes, and flooding rains, Texans have always risen to the occasion and supported their neighbors in innumerable ways. This indelible trait was borne out most visibly during Winter Storm Uri and Hurricane Harvey, as Texans supported each other during these times of need.

Over the decades, TDSPs have made advances in system resilience by leveraging various technologies, including sophisticated operational software, mesh networks, automated switching, reclosers, line sensors, and smart metering. These innovations have helped to not only improve quality of life for the citizens by reducing typical outage duration ("SAIDI") and frequency ("SAIFI"), but have also driven Texas' successful economic engine. Despite these advances, however, Texas has been at the mercy of Mother Nature and has been exposed to several devastating weather events that have significantly impacted the broader grid. In particular, Winter Storm Uri resulted in loss of power for more than 4.5 million homes while Hurricane Harvey left over 1.67M outages in its wake.¹

These types of severe events are likely to become more frequent in the future. With this foresight, the 88th Legislature adopted two of the most potentially impactful bills enhancing the reliability and resiliency of the distribution grid: the transmission and distribution circuit

¹ UT Energy Institute - <https://energy.utexas.edu/research/ercot-blackout-2021>; NERC - https://www.nerc.com/pa/rrm/ea/Hurricane_Harvey_EAR_DL/NERC_Hurricane_Harvey_EAR_20180309.pdf.

segmentation study and a requirement for TDSP resiliency plans.² If resiliency plan requirements are correctly framed, they will provide the basis from which distribution service providers (“DSPs”) can fulfill the goals of the segmentation study: to more granularly and equitably conduct rolling outages during extreme events, to reduce outage durations and infrastructure impacts, to better serve critical customers, to reduce single points of failure, and, most importantly, to save lives.

However, through leadership from this Commission, when combined with the circuit segmentation study, the resiliency plans should do more: they should kick off the process of meaningful distribution grid modernization, under which the former one-way delivery conduit of the past is transformed into the two-way enabler of the robust and diverse 21st century distributed power system. This requires the development of a resilient distribution system not only for purposes of managing load shed, or for new regulated infrastructure investments, but also for enabling robust competitive investments in new infrastructure at the electrical peripheries. Distributed Energy Resources (“DERs”) are an essential component of a resilient distribution grid, and the TDSP’s resiliency plans should incorporate grid enhancements that allow for DERs and microgrids to improve resiliency.

The Public Utility Regulatory Act (“PURA”) §39.001(d) includes a foundational policy that the Commission shall authorize “competitive rather than regulatory methods” to achieve statutory goals and adopt rules that “impose the least impact on competition.” One real world example of this would be requiring TDSPs to adopt policies to isolate distributed resources from load shedding, enabling them to deliver much-needed energy and critical services during times of acute need. Thus, the Resiliency Measures defined in the proposed new rule should include measures that enhance the efficient interconnection of DERs and segmentation of distribution resources and microgrid configurations.

In sum, the concept of resiliency is broader than simply investment in regulatory infrastructure. Resiliency should consider the long-term topography of the entire power delivery system. The TDSP resiliency plans should therefore include measures that encourage and support competitive investment in resiliency. Ultimately, if we are going to spend customer dollars for resilience planning, we should ensure that the most robust distribution grid plan is developed for the citizens of Texas, which includes expanded use of distributed resources, not just load shed planning. Let’s do it all as part of a consistent vision, starting today. The resilience plan, in conjunction with the circuit segmentation study, should be considered the initial steps in a multifaceted solution set in which the full capabilities of the distribution system are optimized for the evolving grid. The

² Public Utility Regulatory Act §38.077, §38.078.

challenges facing the Texas grid are numerous and multidimensional, necessitating an “everything” approach.

II. PROPOSED CHANGES TO THE PROPOSAL FOR PUBLICATION

As an early developer of distribution generation resources (“DGRs”), HEN has experienced the challenges of an evolving distribution grid. Included in these challenges have been the limits to participation of DGRs in certain ERCOT ancillary service markets when connected to load shed feeders³, restrictive state of charge (“SOC”) requirements for ESRs participating in Non-Spin and ERCOT Contingency Reserve Service (“ECRS”)⁴, and a lack of clarity and uniformity regarding utility interconnection requirements, timelines and costs due to the opaque nature of distribution utility (“DSP”) operations.⁵ At a minimum these barriers significantly restrict the added resilience these resources can provide when located at the distribution voltage level; particularly those located toward the end of a radial feeder where customers are a single failure away from a life-threatening outage. Given the number of failure points along the generation-transmission-distribution-customer supply chain, encouraging more dispersed interconnections of resources would only enhance the resilience of the system. HEN is optimistic that these barriers can be addressed and eventually eliminated, but it requires the Commission’s foresight now to ensure that the TDSP resilience plan requirements are not myopic or too narrow in its implementation.

Therefore, HEN proposes the following specific changes to the proposed rule to expand and enhance the TDSP resiliency plans to also consider changes needed in the utility’s distribution operations to foster the growth of DERs and microgrids to permit either continued generation service from distribution resources to critical loads or islanding of microgrids to enable power to be maintained within defined regions such as health or education campuses.

1. Proposed Rule §25.62(c)(1): Resiliency Measures

a. Sectionalizing

Upgrades to the TDU feeder sectionalizing capabilities, metering, and mesh network systems may provide the most immediate, impactful opening for DERs to provide added resilience⁶. Sectionalizing involves installing switches at strategic locations along a feeder circuit

³ ERCOT NPRR 1171, which was adopted by the ERCOT Board of Directors on August 31, 2023, would allow DGRs located on a load shed feeder to have limited participation in Non-Spin and Reg Down, but no other ancillary services.

⁴ See ERCOT NPRR 1096.

⁵ See Project No. 54233, *Technical Requirements and Interconnection Processes For Distributed Energy Resources*; Project No. 54224, *Cost Recovery For Service To Distributed Energy Resources*.

⁶ See HEN’s Comments filed on Sept. 7, 2023 in Project No. 55182, *Circuit Segmentation Study*, for a full discussion of this issue.

that can be controlled by the distribution operator to isolate a single metering location or more discrete groups of loads. This is a more precise way of managing the distribution grid and allows for isolating and segmenting defined microgrid installations or single DERs from other customers. Requiring sectionalizing is an important improvement that could be made now, without requiring significant changes to ERCOT's systems and it would provide significant benefits for the reliability and resiliency of the TDSP's distribution system and the ERCOT grid more broadly. Strategic placement of feeder sectionalizing equipment will allow the distribution operator greater operational granularity and flexibility to shed smaller, more discrete blocks of load rather than entire feeders and allow DERs to remain interconnected to provide critical energy and ancillary services when needed.

One simple example of sectionalizing is the use of reclosers. HEN tends to locate its DGR facilities adjacent to TDU substations. Sometimes, we are fortunate to find that there is an open bay in the substation for us to use for our interconnection (thus creating a dedicated feeder for the DGR). Other times, it makes sense to interconnect the generation or storage facility on a nearby feeder, but to place a recloser further along the feeder after the DGR point of interconnection. The recloser is a device that allows the load to be shed downstream of the recloser, while keeping the DGR connected to the grid, permitting the DGR to deliver energy and/or ancillary services to the grid. This is a simple, faster, less expensive alternative to requiring the construction of a new feeder bay in the substation. Standardizing an approach on the use of reclosers enhances the resilience of the system by supplementing energy supplied by transmission interconnected generation with critical energy services provided at the demand side. This is the sort of "two wins for the cost of one ball" vision that should permeate the Commission's approach to distribution system resiliency.

The opportunity here not only relates to supply options such as DGRs, but also to demand response from microgrids or other DERs. With the accelerating growth of electricity demand and protracted timeframes to interconnect transmission-interconnected generation, it is critical that the Commission use the tools available, including the TDSP resiliency plan and segmentation study, to function as the sleeve through which rapidly deployable, demand-side solutions can be quickly brought to the market.

Further, although pre-approval of costs was removed from the proposed legislation prior to adoption, Commission review and approval of these utility grid modernization plans should provide appropriate assurance of prudence. In the same way that the adoption of TCOS and expedited CCN processing led to a rapid buildout of the transmission grid over the past generation, a similarly clearheaded regulatory vision will help our distribution utilities move forward with dispatch.

HEN therefore proposes that the Resiliency Measures listed in Proposed Rule §25.62(c)(1) be expanded to include a new subsection as follows:

(K) segmentation of distribution facilities for purposes of managing load shed and effective utilization of distributed energy resources;

b. Timely interconnection of DERs

Focusing on resiliency only from the regulated infrastructure perspective is too narrow. As explained above, HEN urges the Commission also to focus upon changes in utility operations and infrastructure necessary to support a robust competitive market at the distribution level for both supply-side and demand-side resources. One significant requirement for enhanced development of these resource is uniform interconnection standards.

Therefore, HEN proposes a new subsection be added to §25.62(c)(1) as follows:

(J) streamlined, expedited interconnection of competitive supply-side and demand-side resources.

2. Proposed Rule §25.62(c)(2): Contents of the Resiliency Plan

a. §25.62(c)(2)(A)

This subsection sets forth the requirements for the utility to support its chosen resiliency plan. The utility should be required to analyze measures that could be provided by competitive entities to enhance resiliency, such as back up or emergency generation. HEN therefore recommends that §25.62(c)(2)(A)(v) be amended and a new subsection (vi) be added, each as follows:

(v) The resiliency plan must explain the selection of each measure over any reasonable and readily-identifiable alternatives, including those that could be provided by non-regulated, competitive entities. The resiliency plan must contain sufficient analysis and evidence, such as cost or performance comparisons, to support the selection of each measure.

(vi). The resiliency plan must include an analysis of the potential integration of various demand-side solutions, including distributed energy resources and microgrid configurations and develop non-discriminatory metrics that would allow market participants to determine system adequacy for the interconnection of demand-side energy resilience solutions.

3. Proposed Rule §25.62(d)(4): Commission review of resiliency plan.

Among the factors the Commission should consider are those as directed by PURA §39.001(d), setting forth the legislative policy favoring competitive solutions. HEN proposes that §25.62(d)(4) be amended by adding a new subsection (G) as follows and re-lettering accordingly:

(G) the extent to which the plan incorporates the statutory policy set forth in PURA § 39.001(d) to authorize competitive rather than regulatory methods to the greatest extent feasible.

4. Proposed Rule §25.62(g)(1): Reporting Requirements

HEN proposes that this section be amended to include a reporting requirement to inform the Commission of all measures completed that remove barriers to entry for DER and microgrids. This will allow the Commission insight into the development of the modernized two-way distribution grid required for the future and may help to identify additional changes or improvements that may be needed. HEN proposes that §25.62(g)(1) be amended by adding a new subsection (D) as follows:

(D) a description of the resiliency plan measures scheduled or completed that will remove barriers to entry and accelerate interconnection of DERs, including microgrid configurations, or other competitive resiliency solutions.

III. CONCLUSION

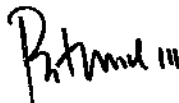
HEN appreciates the Commission's consideration of these comments and looks forward to further discussions with the Commission, Commission Staff, and stakeholders to develop a resilience plan that not only saves lives but also lays out a roadmap for a distribution system across Texas that is as reliable and modern as our competition-enabling transmission grid is. This matters to us because we believe the future of the grid is a decentralized, democratized and digitized one that won't come to pass without a fully modern, multi-functional, and robust distribution network.

Respectfully submitted,

HUNT ENERGY NETWORK, L.L.C.



Stephanie Kroger
Sr. Vice President
Regulatory and Business Development
Hunt Energy Network L.L.C.
1900 North Akard Street
Dallas, Texas 75201
(214) 978-8319
SKroger@huntenergy.com



Pat Wood, III
Chief Executive Officer
Hunt Energy Network L.L.C.
1900 North Akard Street
Dallas, Texas 75201
(713) 454-9592
pwood@huntenergy.com