Filing Receipt

Filed Date - 2025-06-27 11:32:31 AM

Control Number - 54233

Item Number - 91

PROJECT NO. 54233

TECHNICAL REQUIREMENTS AND INTERCONNECTION PROCESSES FOR DISTRIBUTED ENERGY RESOURCES (DERS)	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

HUNT ENERGY NETWORK L.L.C. COMMENTS ON STAFF DISCUSSION DRAFT

The Commission has been evaluating interconnection standards for Distributed Energy Resources ("DERs") since 2022. First in Project No. 51603, and then in this Project 54233 and in Project No. 54224.[1] Several discussion draft rules have been proposed and parties have filed multiples rounds of comments over the last several years. Hunt Energy Network, L.L.C. ("HEN") therefore very much appreciates the Commission bringing the issues of DER interconnection to the forefront again and looks forward to the Commission establishing broad based standards on which distributed energy resources can thrive and flourish. HEN strongly encourages the Commission to continue this momentum and move forward to publish a formal proposed rule for publication for Distributed Energy Resources ("DERs") greater than 250kW based upon the draft rule provisions for §25.210 and §25.212 provided by the Commission Staff ("Draft Rule Provisions"), with the suggested changes proposed by HEN. The end goal in this effort is to match the success ERCOT has had on transmission-interconnected resource investment and operation in the remaining part of our electric system, the distribution grid.

The need to standardize interconnection rules and requirements across distribution service providers ("DSPs"), municipally-owned utilities, and electric cooperatives is pressing, as demonstrated by the recent complaint filed by a DER developer seeking non-discriminatory wholesale access to the delivery system as required by PURA Chapter 35. This case highlights the unique challenges faced by DERs seeking interconnection, including in areas served by

[1] Project No. 51603, *Review of Distributed Energy Resources* (initiated in April, 2022); Project No. 54233, *Technical Requirements And Interconnection Processes For Distributed Energy Resources (DERS)*(initiated in October, 2022); and Project No. 54224, *Cost Recovery for Service to Distributed Energy Resources (DERS)* (initiated in October, 2022).

electric cooperatives, as well as the ever-present disparate requirements for system protection equipment, as a roadblock to distribution generation interconnections.[2]

HEN offers comments in response to the Commission's questions, and specific comments on the Draft Rule Provisions for §25.210 and §25.212.

I. Commission Questions

1. What factors and risks should the commission consider when weighing technological innovations against the need for standardized DER technical requirements, including how such standardized requirements may relate to the safety of utility personnel?

Having developed 30 operational distribution-interconnected energy storage resources in ERCOT, HEN strongly believes that standardized technical requirements are essential for a fair, competitive DER market to flourish. Today, each DSP establishes its own requirements, which are not standardized across DSPs, and often not even set forth in the DSP's tariffs.

The Draft Rule Provisions are a good step towards standardizing requirements but still give the DSPs significant flexibility to set their own standards. For example, §25.210(g) gives the DSP the discretion to "require a DER operator to install additional operation or protection devises on a DER exporting energy…". This broad exception may undermine the goal of standardizing requirements. As an example, in HEN's experience, certain DSPs may require protection devices such transfer-trip requirement, which are expensive and overly-redundant in designs when there are already multiple protection schemes in place on both the utility's and the DER's side of the point of interconnection. This has the practical effect of dissuading DER developers from pursuing projects in that DSP's service area. A goal of the proposed rule should be to create transparency of the technical requirements and comparable treatment of DER developers.

HEN proposes that a reasonable approach to provide DSPs flexibility while still providing transparency (and the ability to address technological innovations) is to require the

[2] *Complaint of Regis Leakey LLC, Regis Medina LLC, Regis Medina Lake, LLC and Regis Utopia LLC Against Bandera Electric Cooperative, Inc.*; Docket No. 57986, initiated April 21, 2025, (hereinafter "Regis Complaint").

DSPs to specify any additional operation or protection requirements in its open access tariff that it must file under Proposed Rule Provision §25.210(k) and §25.211(c). Requiring all DSPs to specify in its open access tariff any additional technical requirements creates a level playing field for all DER providers, allows the DSP flexibility to update its requirements in response to technological innovations, and gives the Commission oversight of these requirements to ensure that they are reasonable and nondiscriminatory.

2. Whether and to what extent §25.210 (>250 kW "large" DER interconnection standards) should apply to municipally-owned utilities and electric cooperatives.

Proposed Rule §25.210 establishes the interconnection and wholesale open access requirements for a DSP to provide wholesale transmission service at distribution voltage within ERCOT. PURA requires that the Commission regulate the provision of this service by municipally-owned utilities and electric cooperatives for generation resources. Thus, the Proposed Rule §25.210 should apply to municipally-owned utilities and electric cooperatives.

Chapter 41 of PURA addresses electric cooperatives and competition. PURA § 41.004 defines the scope of the Commission's jurisdiction over electric cooperatives and provides in relevant part:

> Except as specifically provided otherwise in this chapter, the commission has jurisdiction over electric cooperatives only as follows: (1) *to regulate wholesale transmission rates and service, including terms of access*, to the extent provided in Subchapter A, Chapter 35...."[3]

Chapter 40 of PURA addresses municipally-owned utilities and PURA §40.004(1) contains effectively the same provision as it related to municipally-owned utilities.

Chapter 35, Subchapter A, in turn addresses competition and transmission access in the wholesale market. The very first section in Chapter 35, Subchapter A is explicit that an "electric utility" *includes an electric cooperative* for purposes of Chapter 35, Subchapter A.[4] Under PURA § 35.002, generators have a right to compete for the business of selling power at wholesale. Under PURA § 35.004, the Commission shall ensure that an electric utility (which, as noted, includes an electric cooperative) provides nondiscriminatory access to wholesale transmission service for

[3] PURA § 41.004(1).

[4] PURA § 35.001.

power generation companies. Under PURA § 35.006, the Commission *shall adopt rules* relating to wholesale transmission service, rates, and access that must be consistent with the standards of Chapter 35, Subchapter A among other things.

Importantly, these PURA provisions apply equally to generators that are receiving wholesale transmission service (or accessing the grid to compete for the business of selling power at wholesale) via distribution facilities, such as DERs that are registered with ERCOT as Resources. The definition of "transmission service" in PURA § 31.002(20) (used throughout PURA Chapter 35) expressly provides that "transmission service" includes "transmission over distribution facilities." The Commission's rules reinforce the statutory definition, defining "transmission service" as service that allows a power generation company "to use the transmission **and distribution** facilities of electric utilities, **electric cooperatives and municipally-owned utilities** to efficiently and economically utilize generation resources...to deliver power..." (Emphasis Added).[5]

Many of the DERs that are covered under Proposed Rule §25.210 are registered power generation companies that are registered with ERCOT either as Distribution Generation Resources (DGRs) or Distribution Energy Storage Resources (DESRs). These entities need the protections afforded to them by Chapter 35 of PURA. This is starkly highlighted in the recent complaint filed by a distribution-connected energy storage resource ("DESR") operator, attempting to commission its resource with ERCOT for the purposes of wholesale market participation, was prevented from commissioning the resource because the cooperative, through whom the resource was interconnected, raised issues both unrelated to safety and reliability as well as requirements outside of the agreed-upon interconnection agreement.[6]

Notably, in this case, the Commission Staff agreed that the Commission does have jurisdiction over an electric cooperative because the interconnection dispute between a DESR and a cooperative involves wholesale rates and service, which includes terms of access. HEN recommends that the Proposed Rule §25.210 apply to electric cooperatives and municipally-owned utilities in its entirety, as PURA has intended from the beginning of the competitive era.

[5] 16 TAC §25.05(139).

[6] Regis Complaint, Docket No. 57986, Commission Staff's Statement of Position, filed May 22, 2025.

II. PROPOSED RULE PROVISIONS: §25.210

1. Application (§25.210(a))

The Discussion Draft proposes that the new §25.210, establishing uniform interconnection standards for DERs with a nameplate capacity greater than 250kW, applies to DSPs and applicable DER operators. However, it notes a more limited applicability to municipally-owned utilities and electric cooperatives. HEN supports the overall approach to separate the rules applicable to larger DERs that are registered to participate in the ERCOT market from the rules for smaller DERs. However, as explained above in response to the Commission's second question, HEN believes that §25.210 should apply to electric cooperatives and municipally-owned utilities in its entirety.

The interconnection of DERs to the distribution grid often facilitates the transport of generated energy via the distribution system into the transmission grid for participation in the wholesale market. Texas law applies to entities providing wholesale transmission service at distribution voltage, which these DER interconnections utilize. Therefore, requiring municipally-owned utilities and electric cooperatives to comply with the terms of §25.210 is necessary to ensure consistent, nondiscriminatory access and reliability across the state. Therefore, HEN proposes that §25.210(a)(2) be revised to state that §25.210 applies to electric cooperatives and municipally-owned utilities.

2. Definitions (§25.210(b))

a. "Distribution energy resource (DER)" should be amended to expressly include energy storage as there could be some ambiguity under the definition as proposed. Also for clarity, HEN recommends that this definition expressly include a DER powered by natural gas that does not meet the definition of a "distributed natural gas generation facility".

b. "DER operator" is not a defined term within the ERCOT protocols. HEN would like to raise that any DER operator is registered with ERCOT through their Resource Entity and, if applicable, a Qualified Scheduling Entity to fully control the resource(s) operations. Hence that DER function is managed under specific

defined roles depending on their characteristics in the ERCOT protocols but is not a standalone term.

c. "Commercial operations date" definition refers to the "listed services in the interconnection application" but the draft Interconnection Application does not specify the services that the DER is providing. In addition, this definition differs from that in the draft DER Interconnection Agreement. HEN recommends that the definition of "commercial operations date" follow the definition in the Interconnection Agreement, that is "the date on which construction of the DER has been substantially completed, testing and commissioning of the DER has been completed, and the DER is ready to generate power."

3. Terms of Service (§25.210(d))

a. **Disconnection and Reconnection (§25.210(d)(2)(B))**

i. Disconnection without prior notice is a severe remedy and HEN is concerned that the definition of a "safety and reliability issue" is too broadly drafted and could result in DERs being disconnected without an opportunity to resolve or cure the issue resulting in the safety or reliability concern to the reasonable satisfaction of DER. HEN would propose that §25.210(d)(2)(B) be amended as follows:

> "For purposes of this subparagraph, a "safety and reliability issue" means an issue that represents an immediate threat to public safety, the safety of the DSP's or the DER operator's personnel, the safety of the DSP's customers, or to the reliability and continuity of electric service, which cannot be safely cured without disconnection of the DER."

ii. Disconnection of a DER could only occur after the DER has constructed the facility and has interconnected with the DSP in accordance with the interconnection agreement. If there is a safety issue that arises at this point, the appropriate remedy is to identify the issue, amend the interconnection agreement if necessary, and perform additional testing to ensure that the issue is resolved. HEN does not agree that a new impact study should be required for a facility that is at or near commercial operation. The DER has constructed its facility in reliance upon the DSP's original impact study and, provided that

the DER operator has complied with the terms and conditions of the interconnection agreement, it is not reasonable to subject the DER to several months of downtime while waiting for a new impact study to be performed. HEN would therefore propose that §25.210(d)(B)(ii)(I) be removed.

b. **System emergency causing an unscheduled outage (§25.210(d)(2)(D))** – A benefit of DERs interconnected adjacent to a distribution substation is that they have the capability and flexibility to serve load through both the transmission and distribution system. In the event of a load shed condition the DSP should make reasonable efforts to ensure that the DER(s) can continue providing energy to the grid, particularly those feeders and customers which may be deemed critical. The DSP Segmentation Studies filed in Docket No. 55182 should be utilized in conjunction with the enhanced visibility of DER locations to improve the resiliency of the distribution grid.

4. Pre-screen Studies (§25.210(e))

The draft rule outlines a process for DER operators to request a pre-screen study prior to submitting a formal interconnection application. It specifies the minimum information required from the DER operator and the nature of the results provided by the DSP. The draft indicates that the DSP must use best efforts to provide the results within 15 working days, but not to exceed 30 working days, with potential extensions under certain conditions.

The proposed timeframe for the pre-screen study (up to 30 working days, plus extensions) may be longer than necessary for a general study that does not involve detailed engineering. Based on industry experience, such preliminary assessments can often be completed more quickly. Shortening this timeline to 10 working days and not to exceed 20 working days would provide DER developers with earlier feasibility feedback.

Additionally, while the draft specifies the results will indicate accommodation capacity and list needed additions or upgrades, it does not explicitly require a detailed cost estimate at this stage. HEN proposes that including a non-binding, high-level cost range estimate within the pre-screen study results would significantly benefit DER providers in evaluating the

economic viability of a project before incurring the costs and commitment associated with the full impact study. Furthermore, HEN suggests that the applicable DSP tariff and study fees be provided to the DER operator, and the parameters that dictate the specific study fees with the prescreen for full cost transparency.

5. **Interconnection Process (§25.210(f))**

The draft requires a DER operator to submit a completed interconnection application and supporting documentation to initiate the process. The DSP is then to review for completeness and adherence to technical criteria, and "approve, suspend, or reject the interconnection application", with specific reasons listed for rejection.

HEN provides the following comments as part of the interconnection application:

a. **Rejection of an interconnection application (§25.210(f)(1)(B))** - While the DSP may have the option of rejecting an interconnection application based upon specific reliability or safety reasons, the DER owner must have an opportunity (within a reasonable timeframe) to cure these issues to the mutual satisfaction of the DSP and DER operator. Further, because the impact study is designed in part to identify reliability impacts, the reliability or safety reason must be clearly apparent without performing the impact study.
b. **Suspension of an application (§25.210(f)(1)(D))** – Under the proposed provisions, the DSP may suspend an application if more than one impact study application at the same substation is under review by the DSP. However, as part of a competitive market, other entities must be allowed the opportunity to compete for interconnection at that location should they have the financial capacity to commit to that interconnection point as well as proof of site control before the other entity. HEN would propose that if multiple entities are seeking an application at the same substation, and the substation is unable to accommodate both entities, then the entity that submitted the application first with a demonstration of site control (i.e. an option, lease or ownership) should take precedence.
c. **Impact Study (§25.210(f)(2)(C)(vi))** - HEN agrees with the details included in the results of the impact study. Included in these details, for the purposes of full cost

transparency, should be the specific tariff which will be applied to the interconnecting entity and billed by the DSP.

d. **(4)(A)(ii)** - The draft requires coordination between the DSP and DER operator to complete testing before the commercial operations date. Testing of protection systems must include functional tests and verification of settings. If modifications are deemed necessary after testing by a DSP or DER operator, HEN recommends that the DSP provide written notice of the needed safety or system reliability modifications to the DER operator. It is imperative that issues raised by DSPs be limited to verifiable, legitimate safety or system reliability because DSPs have unilateral capabilities to stymie and delay the interconnection of DERs by interjecting issues not immediately defined in the IA or compliance tariffs. Once the DSP and DER operator are in mutual agreement, the DER operator will submit a revised interconnection application within ten working days, but the revisions to the application should not re-start the interconnection process.

6. Contribution in Aid of Construction (CIAC) (§25.210(g)(3))

HEN supports the draft rule requiring the DSPs to provide a reasonably estimated, detailed CIAC covering the costs incurred by the DSP for necessary interconnection facilities and upgrades, with a true-up process with potential reimbursement. We support the requirement for itemized CIAC estimates and the true-up process to ensure transparency and accurate cost allocation. HEN does recommend that the reconciliation process be shortened. 180 days seems excessive, and HEN recommends that the DSP reconcile invoices for the total DSP upgrade costs with the DER operator within 120 calendar days.

HEN and others continue to be negatively impacted by the broader cost allocation issues for certain types of DERs, such as Distributed Energy Storage Resources (DESRs), including whether they should incur certain CIAC charges or monthly tariffed charges, which remain under discussion in other proceedings (e.g., Project No. 54224). We encourage the Commission to resolve these fundamental cost allocation issues to provide clarity and consistency for DER interconnections and encourage the resiliency these resources provide.

If this is not done, DER providers will be required to litigate this issue in each utility's tariff filing/rate case, as we have already had to do, pending generic Commission action on the issue

7. Open Access Tariff (§25.210(k))

HEN strongly supports the requirement that all DSPs, including municipally-owned utilities and electric cooperatives, be required to file an open access tariff for Commission approval as required under proposed §25.210(k). HEN recommends that the Commission provide additional specificity in this proposed provision to require that DSPs include the following in their tariff:

1. All technical requirements, including any additional requirements pursuant to proposed §25.212(g) (including all system protection requirements, etc.);
2. All financial requirements including study fees and CIAC allowances ; and
3. All wholesale distribution tariff charges applicable to DESRs and all terms and conditions associated with such charges.

HEN also proposes that all DSPs (including municipally-owned utilities and electric cooperatives) be required to post their tariffs on their website and provide a copy of the tariff to DER operators when such operator submits an interconnection application. These requirements will go a long way to providing much-needed transparency to DER operators and will help to assure comparable open access between DER operators.

COMMENTS ON PROPOSED RULE 25.212

4. Application: §25.212(a)

HEN supports the approach taken in the draft §25.212 that distinguishes between technical requirements for smaller DERs (less than 1 MW and not ERCOT-registered) and larger DERs (1 MW or more or ERCOT-registered). Requiring larger, market-participating DERs within ERCOT to follow ERCOT's technical requirements is appropriate given their potential impact on the wholesale market and grid reliability coordinator functions. However, HEN is concerned that this intent is not clear throughout proposed §25.212 and situations could arise in which differing standards could still apply. Specifically, while the draft rule

provides that ERCOT may establish alternative frequency and voltage standards, it does not address which rules control for power quality Therefore, HEN proposes the following change to section §25.212(a) (Application) to clarify that in the event of a conflict, the ERCOT Protocols would apply for a DER that is greater than 1 MW and registered with ERCOT.

§25.212(a): Application. This section prescribes the minimum technical and operational requirements that must be maintained on an ongoing basis for all distributed energy resources (DERs) in Texas, interconnected and operating in parallel with a Distribution Service Provider' s (DSP) distribution system, provided that, for DERs greater than 1 MW and registered with ERCOT, the ERCOT protocols shall control in the event of a conflict between the ERCOT protocols and this section.

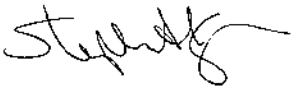
HEN appreciates the Commission's approach to developing standardized interconnection requirements to which all interconnecting entities, original equipment manufacturers, and energy operators can adhere. HEN would also encourage commission staff to consider including language requiring adherence to the technical standards when DERs are aggregated for operations. More specifically, irrespective of whether the aggregated DERs are of the same or disparate technology types, the aggregated DERs must conform to the same technical requirements as an individually operating DER. With all of HEN's distributed resources participating in the ERCOT market, we would encourage the commission to generally align technical standards with ERCOT standards such that all DERs are fully capable of supporting our grid during times of need.

CONCLUSION

HEN appreciates the opportunity to offer these comments and is available to answer questions the Commission may have.

Respectfully submitted,

HUNT ENERGY NETWORK L.L.C.



Stephanie A. Kroger
President
Hunt Energy Network L.L.C.
1900 North Akard St.
Dallas, Texas 75201
skroger@huntenergy.com

PROJECT NO. 54233

TECHNICAL REQUIREMENTS AND INTERCONNECTION PROCESSES FOR DISTRIBUTED ENERGY RESOURCES (DERS)	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

HUNT ENERGY NETWORK L.L.C. EXECUTIVE SUMMARY OF COMMENTS

Hunt Energy Network, L.L.C. (HEN) commends the Public Utility Commission of Texas (PUCT) for advancing standardized interconnection rules for Distributed Energy Resources (DERs). With over 30 distribution-connected energy storage systems in ERCOT, HEN urges prompt adoption of clear and consistent rules to support market participation and grid reliability. Transparency ensures fair treatment and encourages innovation.

Key Points & Recommendations

- **Standardization & Transparency:** Require standardization of DER interconnection requirements across all DSPs; mandate publication in open access tariffs to eliminate costly and redundant barriers to entry (e.g., transfer-trip systems).
- **Applicability:** PURA §§ 35.004, 35.006, 41.004, and 40.004 affirm the Commission's jurisdiction over wholesale transmission service, including distribution voltage service, for electric cooperatives and municipally-owned utilities. Fully apply rules to all DSPs, including co-ops and municipal utilities, ensuring nondiscriminatory wholesale distribution access.
- **Rule Improvements:** Clarify in definitions that DERs include energy storage and some gas generators and align "commercial operation date" with the interconnection agreement. Disconnection should be limited to urgent safety threats; post-construction re-studies should be avoided. Keep DERs running for critical loads in emergencies.
- **Process Enhancements:** Shorten prescreen study timeline to 10–20 working days; include high-level cost estimates and tariff details early for developer clarity. Let DERs cure safety/reliability issues and prioritize applications by site control and submission timing. Reconcile CIAC fees within 120 days. Resolve DESR cost allocation in parallel dockets.
- **Open Access Tariff Publication:** All DSPs should post PUCT-approved tariffs online and share them with applicants, including technical requirements, fee schedules, and wholesale distribution charges for energy storage.
- **Technical Standards:** For DERs >1MW, ERCOT protocols should prevail in case of conflict. Regardless of technology type, aggregated DERs should meet the same standards as standalone resources for system reliability.

In summary, HEN supports the Commission's initiative to establish clear, fair, and transparent DER interconnection rules that promote open access and urges prompt action to publish formal rules that reflect these recommendations. Most importantly, upon resolution of the technical requirements, HEN asks the commission to move swiftly to ensure equitable participation of DERs in the ERCOT market by resolving the 54224 cost allocations issues that have been a hinderance on sector growth for many years.