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PROJECT NO. 54233

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

HUNT ENERGY NETWORK L.L.C.

COMMENTS AND REDLINE OF DISCUSSION DRAFT §25.211 AND §25.212

Hunt Energy Network, L.L.C. (“HEN”) commends the Commission Staff for the Workshop process that has concluded. The process was efficient, focused and provided interested parties with meaningful input into the development of the proposed rule language. 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 §25.211 and §25.212 provided by the Commission Staff before each Workshop (“Draft Rule Provisions”), with the suggested changes proposed by HEN, and included in HEN’s redline of the Draft Rule Provisions, attached as Attachment A.

HEN agrees with the approach taken in the §25.212 Draft Rule Provisions providing that DERs greater than one MW or registered as a Resource with ERCOT must follow the technical requirements established by ERCOT (§25.212(k)) and the other provisions of §25.212 would only apply to those DERs smaller than one MW that are not registered with ERCOT. If this approach remains, HEN does not have further comments on the §25.212 Draft Rule Provisions.

Regarding the §25.211 Draft Rule Provisions, HEN’s key concerns were expressed during the Workshops and are summarized below. HEN has also provided a redline to the Draft Rule Provisions in Attachment A to these comments, which include all of HEN’s proposed changes.

1. Applicability (§25.211(a))

HEN strongly supports the application of the Draft Rule Provisions to electric cooperatives and municipalities. Texas law clearly applies to these entities because they provide wholesale transmission service at distribution voltage to DERs; that is, the

interconnection of DERs to the distribution grid allows the energy produced to be transported via the distribution system into the transmission grid and bid into the ERCOT wholesale market. The definition of transmission service in PURA § 31.002 expressly includes transmission service provided over distribution facilities. Further, PURA §39.203(b) states that “when necessary to serve a wholesale customer an electric utility, an electric cooperative that has not opted for customer choice, or a municipally owned utility that has not opted for customer choice shall provide wholesale transmission service at distribution voltage.” This statutory requirement is also reflected in the Commission’s rules. 16 TAC §25.191(d)(2) provides that “an electric cooperative that has not opted for customer choice or a municipally-owned utility that has not opted for customer choice shall provide wholesale transmission service at distribution voltage when necessary to service a wholesale customer.”

2. Modifications to DERs (§25.211(b)(13), (d)(2)(F))

HEN proposes several changes relating to modifications to a DER after the Distribution Resource Interconnection Agreement (“DRIA”) is executed. There are several types of modifications or changes that a DER could make, ranging from replacement of a piece of equipment with the same type of equipment which does not change the operations of the DER to a change that materially impacts how the DER was studied by the DSP or how the DER operates, such as a material increase in capacity or a change in inverter type. Changes that either do not impact the DSP studies that had been performed, have been agreed to between the DSP and the DER Provider as part of the interconnection process, or have been authorized by the DSP and tested accordingly, should not require additional interconnection studies or new interconnection agreements. This would include like-for-like changes to equipment as suggested by Enchanted Rock in their comments in this Project filed on July 18, 2023. This approach is also consistent with Section 6: Modifications of Generator Facilities in the draft DRIA included in the Commission Staff’s filing in this Project on November 22, 2022, which requires a DER Provider to obtain the consent of the DSP prior to making any modifications to the DER “that vary from the [DER] studied by the DSP as part of the interconnection request.”

HEN therefore proposes that the definition of “Substantial Modification” in §25.211(b)(13) be struck since that term is not used in the Draft Rule Provisions. If

Commission Staff determines that a similar term is necessary, then HEN would request that DER modifications that are replacements of like-for-like equipment or modifications that do not vary or change the DER studied by the DSP do not require a restudy or a DRIA amendment. HEN also proposes changes to § 25.211 (d)(2)(F) (Unauthorized Modifications) to include a reference to Section 6 of the DRIA and to expressly state that a replacement of like-for-like equipment does not require a restudy by the DSP.¹

3. Removal and Disposal of DERs (§25.211(g)(4))

HEN strongly opposes the inclusion of §25.211(g)(4), which allows a DSP to require a DER Provider to post security with the DSP for the costs of removal of the DER facility itself and allows the DSP to use the security to remove the DER facility after the DER is no longer operational. This provision does not address the interconnection facilities, but rather the DER facility itself. The DER is typically not built on land owned or controlled by the DSP and the DSP has no legal right or authority to dictate what happens to the DER equipment that is disconnected from the DSP's distribution system and not located on land controlled by the DSP. In fact, the DSP would likely incur substantial liability if it entered onto property it did not own or control to remove another entity's equipment. This is an issue that is resolved between the landowner and the DER as lessee (if the DER does not own the property). In addition, the cost of removal could be significant and it is unreasonable to permit the DSP to hold security from the DER for up to 15-20 years until the end of the useful life of the DER. This would unnecessarily tie up capital for the DER Provider. Finally, this requirement is not imposed on any Resource interconnected at transmission level and it would place DERs at a substantial competitive disadvantage relative to transmission-connected resources. HEN respectfully requests that this provision be struck.

4. Contribution In Aid of Construction ("CIAC") (§25.211(g)(3))

Cost allocation issues for Distribution Energy Storage Resources (DESRs), a subcategory of DERs, remains unresolved by the Commission in Project No. 54224. These issues include whether DESRs should be treated comparably to transmission-interconnected

¹ HEN redlined the version of §25.211(d)(2)(F) that was included in the Commission Staff's filing in this Project on June 23, 2023 before the June 30, 2023 Workshop since that sub-section was revised from the version filed by the Commission Staff on June 9, 2023 to reflect discussion from the June 14, 2023 workshop.

ESRs and thus not be required to pay monthly tariffed charges to the DSP as well as CIAC charges. HEN strongly encourages the Commission to timely resolve these issues. That said, if CIAC is required, then HEN strongly supports the transparency provided by itemized CIAC estimates and CIAC true-ups as proposed in § 25.211(g)(3), as well as timely commencement of engineering and equipment procurement by the DSP.

5. Pre-Screen Studies (§25.211 (e)(3))

To date, HEN has interconnected 14 DESR projects in ERCOT, with another 7 DESR projects in the later stages of interconnection. In HEN's experience, the pre-screen study is not a time-consuming study for the DSPs and is typically provided quickly, generally within two or at the latest, three weeks. The proposed rule provides 25 business days (nearly two months) for the DSP to provide the pre-screen study. HEN suggests that this is too long and suggests shortening the time to 15 business days (approximately one month).

Additionally, within the prescreen study, HEN proposes the addition of a nonbinding cost range to interconnect the DER to the DSP's system. Prior to fully committing to the costly and detailed interconnection studies, the prescreen studies preliminarily inform the DER provider whether the project may be economically viable to continue pursuit.

6. Interconnection Application (§25.211(f)(1))

The Interconnection Application begins the interconnection process. Proposed §25.211(f)(1) states that the interconnection application must be "fully-funded." It is not clear what this means since the CIAC is not even a known estimate at the time the application is provided. HEN therefore recommends removing this phrase. HEN also recommends deleting the last sentence in this subsection which states that the DSP approves or denies the application. Again, this is before any studies have been performed. The provisions in subsection (f)(1)(A)-(C) appropriately address what HEN believe is intended, which is to have a process for the DSP to review the application for completeness.

7. Interconnection Agreements (§25.211(3)(C), (E))

This provision allows the DER Provider and DSP to agree to terms that vary from the standard DRIA, provided that the changed terms do not conflict with the Commission's DER interconnection rules. HEN suggests that the changes should also not conflict with ERCOT

Protocols. HEN has experienced situations in which the DSP requires provisions that are inconsistent with the ERCOT Protocols, which places an ERCOT-registered Resource in an untenable position.

HEN also proposes a change to §25.211(f)(3)(E) which allows the DSP to terminate the DRIA if the DER Provider cannot complete the DER commissioning within 12 months after the in-service date of the DSP facilities. HEN proposes that the 12 months should be extended day-for-day for the DSP's delay in meeting the in-service date for completion of the DSP's interconnection facilities and energization. HEN is currently experiencing situations in which the DSP is delayed by weeks and sometimes months in meeting the energization date set forth in the interconnection agreement. The DER cannot complete commissioning until energization has occurred, thus a day-for-day extension is appropriate.

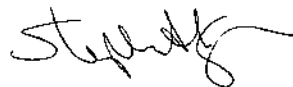
8. Testing (§25.211(h)(B))

This provision addresses the testing of the DER and the interconnection prior to operation. If the testing demonstrates that a modification is required to the DER, HEN proposes that the appropriate process is to amend the DRIA to reflect the modifications, allow the DER to incorporate the modifications and re-test. The DER Provider should not be required to go back to the beginning of the entire interconnection process with a new application.

HEN appreciates the opportunity to offer comments, again offers kudos to the Commission Staff for a well-run Workshop process, and respectfully urges the Commission to move forward with a formal Proposed Rule for Publication.

Respectfully submitted,

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ATTACHMENT A

**HEN REDLINE OF DRAFT RULE PROVISION DISCUSSED AT JUNE 16, 2023
WORKSHOP**

§25.210. Interconnection of Distribution Energy Resources (DERs) with a Nameplate Capacity Over 250kW for Parallel Operation.

- (a) **Application.** This section applies to distribution service providers (DSPs), distributed energy resource (DER) providers, and DERs with a nameplate capacity over 250kW or if interconnecting in the Electric Reliability Council of Texas (ERCOT) power region and registering with ERCOT, interconnected or seeking to interconnect with a DSP's distribution system in the state of Texas, except as provided under Public Utility Regulatory Act (PURA) § 35.037, or to the extent provided by federal law.
- (b) **Definitions.** The following words and terms when used in this section have the following meanings, unless the context indicates otherwise:
 - (1) **Allowable Expenditure** – An amount included in the DSP's tariff unless a different amount or calculation is otherwise provided by commission rules.
 - (2) **Certified equipment** -- A specific generating and protective customer equipment system that has been certified by a National Recognized Testing Lab (NRTL) as complying with applicable portions of UL-1741 and IEEE-1547 standards, as determined by the distribution utility relating to safety and reliability when paralleling with the utility grid at the time of interconnection.
 - (3) **Distributed natural gas generation facility** -- A DER installed on the DER provider's side of the meter that uses natural gas to generate not more than two megawatts (MW) of electricity.

- (4) **Distribution energy resource (DER)** -- A source of electric power connected at a voltage of less than 60 kilovolts (kV), that can be interconnected in parallel operation to the distribution system. The term includes generators, energy storage systems, and distributed renewable generation facilities as defined in § 25.217 of this title (relating to Distributed Renewable Generation).
- (5) **DER provider** -- Any entity operating a DER in Texas.
- (6) **Distribution system** -- A DSP's electric delivery system operating under 60 kV.
- (7) **Interconnection** -- The physical connection of a DER to a distribution system in accordance with the requirements of this section to enable parallel operation with the distribution system.
- (8) **Network** -- Two or more utility primary distribution feeder sources electrically connected on the secondary (or low voltage) side to form a power source for one or more customers. A network is designed to maintain service to the customers even after the loss of one of these primary distribution feeder sources.
- (9) **Parallel operation** -- The operation of a DER while the DER is interconnected to the distribution system.
- (10) **Point of interconnection** -- Any point where the electrical conductors of the distribution system are interconnected to a DER's conductors and where any transfer of electric power between the DER and the distribution system takes place, such as the switchgear near the meter.
- (11) **Protective Function** -- A function carried out using hardware and software that is designed to prevent unsafe operating conditions from occurring before, during, and

after the interconnection of a DER with a distribution system. For purposes of this definition, unsafe operating conditions are conditions that, if left uncorrected, would result in harm to personnel, damage to equipment, unacceptable system instability or operation outside legally established parameters affecting the quality of service to other customers connected to the distribution system.

- (12) **Stabilized** – A distribution system is considered stabilized when, following a disturbance, the distribution system returns to the normal range of voltage and frequency for a duration of no less than two minutes. A shorter time may be mutually agreed to by the DSP and DER provider.
 - (13) ~~**Substantial modification** – For a given DER, a change in the fuel type of one or more of the energy resources at the facility, the replacement of any inverter or protective relay, or an increase in the facility's capacity (kW output) by more than 10%.~~
- (c) **Requirement for interconnection of a DER.** A DER may not be interconnected with a DSP's distribution system unless the criteria of this subsection are met and, as applicable, maintained on an ongoing basis.
- (1) A DER provider must comply with the technical and operational requirements of §25.212 of this title on an ongoing basis upon interconnection of the DER with the distribution system.
 - (2) For a given DER, a DER provider must have a currently effective executed interconnection agreement with the DSP using the form prescribed by the commission.

(d) **Terms of service.** A DSP must provide service to an interconnected DER under the following terms.

(1) **Prohibited costs.** A DSP must not charge a DER provider charges assessed for the disconnection of a DER at the order of a DSP in accordance with subparagraph (3)(D)-(E) of this subsection.

(2) **DSP service obligations.** A DSP must comply with the requirements of this paragraph when providing service to a DER interconnected to the DSP's distribution system.

(3) **Disconnection and reconnection.** A DSP may only disconnect a DER from the DSP's distribution system in accordance with the conditions of this paragraph.

(A) **Termination of interconnection agreement.** Upon expiration or termination of the executed interconnection agreement with the DER provider, in accordance with the terms of the executed interconnection agreement, the DSP may disconnect the DER.

(B) **Safety and reliability caused by DER.** Upon the DER provider discovering an issue that represents a threat to public safety, to the safety of the DSP's or DER provider's personnel, to the safety of the DSP's customers, or to the reliability and continuity of electric service, then the DER provider must immediately notify the DSP. When a DSP becomes aware of an issue that represents a threat to public safety, to the safety of the DSP's or DER provider's personnel, to the safety of the DSP's customers, or to the reliability and continuity of electric service then the DSP must immediately disconnect the DER if necessary to resolve or address the

issue. If the interconnected DER is the cause of a safety or reliability issue, such an issue must be resolved prior to reconnection, and in accordance with subsection (f) and (h) of this section, a DSP may require:

- (i) a DER provider to submit a new interconnection application;
- (ii) a new impact study to be performed;
- (iii) the executed interconnection agreement to be amended; or
- (iv) additional testing in accordance with subsection (h) of this section.

(C) **DER non-compliance.** If at any time a DER no longer meets the requirements listed in subsection (c) of this section, then a DSP must disconnect the DER. Upon notification from the DER provider that the DER has been restored to compliance with the technical and operational requirements of §25.212 of this title, in accordance with subsection (c) of this section, the DSP must have an inspector verify such compliance as quickly as is reasonably practicable. Upon verification, the DSP shall reconnect the DER.

(D) **System emergency causing an unscheduled outage.** A DSP may temporarily disconnect a DER without prior written notice in cases where continued interconnection may endanger persons or property. During an unscheduled outage of a DSP's distribution system, the DSP may temporarily disconnect a DER to make immediate repairs. As quickly as is reasonably practicable, the DSP must notify the DER provider of the unscheduled outage and reconnect the DER.

(E) **Scheduled outages for routine maintenance, repairs, and modifications.** A DSP may temporarily disconnect a DER from the DSP's distribution system for a scheduled outage, provided that the DSP issues notice in writing to the DER provider at least seven business days prior to such a disconnection. The DSP must reconnect the DER as quickly as is reasonably practicable following any such service interruption.

(F) ~~**Unauthorized modifications.** A DSP may disconnect a DER from the DSP's distribution system upon discovery of a modification that was not previously authorized by the DSP in accordance with paragraph (h)(3) of this section. The DSP may reconnect the DER as stipulated by the executed interconnection agreement. Prior to reconnection and in accordance with subsection (f) of this section, a DSP may require:~~

~~(i) a DER provider to submit a new interconnection application;~~

~~(ii) a new impact study to be performed;~~

~~(iii) the executed interconnection agreement to be amended; or~~

~~(iv) additional testing in accordance with subsection (h) of this section. [See redline below of Subsection (d)(2)(F) in provisions discussed at June 30 Workshop]~~

(4) **Metering.** Metering must be consistent with Chapter 25, Subchapter F of this title (relating to Metering).

(5) **Tariff updates.** Not later than 30 calendar days after the effective date of this section, a DSP who is also a TDU must file a tariff amendment with the

commission for approval to comply with this section. A DSP that is not also a TDU must amend its tariffs, as appropriate, to comply with this section. A DSP that is not also a TDU and sells electricity must also include back-up, supplemental, and maintenance power services for DERs in its tariff.

- (6) **New or amended interconnection agreements.** Newly executed or amendments to existing executed interconnection agreement that are completed 30 or more calendar days after the commission's approval of a DSP's compliance tariff, filed in accordance with paragraph (5) of this subsection, must meet the requirements of this subsection.

(g) **Responsibilities during and after interconnection.**

- (1) **Communications.** A DER provider must provide the DSP with complete and detailed written information concerning the proposed DER during each stage of the interconnection process. Communications concerning the nature of a proposed DER must be consistent with §25.84 of this title (relating to Reporting of Affiliate Transactions for Electric Utilities), §25.272 of this title (relating to Code of Conduct for Electric Utilities and their Affiliates), and §25.273 of this title (relating to Contracts between Electric Utilities and their Competitive Affiliates).
- (2) **Anticompetitive practices.** A DSP and its affiliates must not use knowledge of a proposed DER submitted to it for pre-screen study, impact study, or interconnection to prepare competing proposals to the DER provider that offer either discounted rates in return for not installing the DER, or offer competing DERs.

- (3) **Contribution in aid of construction.** A DSP must acquire and construct any facilities necessary to interconnect a DER in accordance with good utility practice.
- (A) Notwithstanding any other law, a DSP may require a CIAC from a DER provider for the reasonably estimated costs that a DSP incurs to construct, install, or upgrade any distribution system or interconnection facilities that are necessary to operate the DER at its requested service level, including such facilities inside the DSP's substation, and for the costs of any acquisitions of the additional facilities that would affect the tax liability of a DSP. Such reasonably estimated costs are limited to those specified in an executed interconnection agreement and, if applicable, exceed the allowable expenditure amount. The DSP must provide the DER provider an estimation of the itemized costs to be collected through the CIAC.
- (B) Notwithstanding any other law, a DSP may require a DER provider to post a security for the costs of planning, licensing, and constructing new or updated distribution or transmission facilities not covered by the CIAC.
- (i) A DSP must return the security to a DER provider within 10 business days after a DER provider notifies a DSP in writing of commencement of commercial operation.
- (ii) If a DER provider abandons a site and new distribution or transmission facilities are no longer required, a DSP may retain as much of the security as is required to recover the costs the DSP incurred in planning, licensing, and construction activities related to the planned new or upgraded distribution or transmission facilities.

- (C) A DSP must commence procurement of the additional facilities that are required to enable the interconnection no later than 30 calendar days after payment in full of the CIAC and, if applicable, a security.
- (D) Within 180 calendar days of the date the DSP is notified that the DER is commencing commercial operations, a DSP must provide reasonably itemized invoices to the DER provider for the facilities the DSP procured and installed to enable the DER to interconnect to the distribution system. If the invoiced amounts are less than the total of the allowable expenditure and the CIAC, then the DSP must reimburse the DER provider all excess funds the DER provider paid the DSP.

~~(4) **Financial assurance for removal and disposal of DER.** Notwithstanding any other law, a DSP may require additional financial assurance, in addition to the CIAC and security described under paragraph (3) of this subsection, from a DER provider for costs associated with removal and disposal of the DER and related equipment and facilities once the DER is no longer intended to be operational at its sited location. A DER provider may provide the financial assurance as an irrevocable stand-by letter of credit or a cash deposit to be held by the DSP in a segregated cash account.~~

- ~~(A) If the DER provider removes the DER and related equipment and facilities, then the DSP must return the financial assurance to the DER within 10 business days of the completion of the removal of the DER and related equipment and facilities.~~

- ~~(B) — If the DER provider does not remove the DER and related equipment and facilities within 60 calendar days of the date the DER is no longer intended to be operational at its sited location or upon termination of operation of the facility as intended, then the DSP may use the financial assurance to cover the costs of removing and disposing of the DER and related equipment and facilities.~~
- ~~(C) — The DSP must determine an appropriate amount of financial assurance and provide the DER provider this amount with the results of the impact study.~~
- ~~(D) — The DER provider must provide the DSP the required financial assurance prior to the DER commencing commercial operations.~~

HEN Redline of Draft Rule Language Provided for June 30, 2023 Workshop

- e) **Pre-screen study.** A DER provider may request a pre-screen study for one or more proposed sites for a DER prior to submitting an interconnection application to a DSP under subsection (f) of this section. A DSP must complete pre-screen study in accordance with good utility practice.
- (1) Results from a pre-screen study for a DER must:
 - (A) indicate whether the requested exporting level, and as applicable charging level, of the DER can be facilitated at the DSP's substation, given known applications in place or under interconnection, without requiring significant transmission system upgrades;
 - (B) identify potential limitations at the DSP's substation for the interconnection of the DER; and
 - (C) list the additions or upgrades needed to accommodate interconnection of the DER at the DSP's substation, including, but not limited to, a new substation, an additional bay, or transformer replacement.
 - (2) When conducting a pre-screen study, the DSP must account for all DERs with completed and fully-funded interconnection applications in the interconnection process at the substation.
 - (3) Upon payment of the pre-screen study cost by the DER provider, the DSP must perform a pre-screen study. A pre-screen study is undertaken as of a stated date and a DSP must use best efforts to provide the results of a pre-screen study within ~~twenty-five~~fifteen (25~~15~~) business days of the date the pre-screen study request is received by the DSP. Such time may be extended if a DER provider and its

affiliates collectively request pre-screen studies for more than ten sites currently pending with the DSP, or if the total number of pre-screen studies pending with the DSP exceeds ~~ten~~thirty sites. If a DSP cannot provide a pre-screen study within ~~twenty-five~~fifteen (25~~15~~) business days, the DSP must notify the DER provider of the delay and provide an estimated completion date for the pre-screen study.

- (4) A pre-screen study is not a substitute for the impact study. A pre-screen study will not, on its own, reserve or hold capacity on the distribution system.
- (f) **Interconnection Process.** A DSP must permit a DER provider to interconnect to the DSP's distribution system any DER that meets the requirements of § 25.212 of this title and has successfully completed the following paragraphs (1)-(3) of this subsection.
 - (1) **Interconnection application.** To initiate the interconnection process, a DER provider must submit to the DSP a completed ~~and fully funded~~ interconnection application and all supporting documentation necessary for a DSP to conduct an impact study as required by paragraph (2) of this section. ~~A DSP must approve or deny the interconnection application and promptly notify the DER provider of the decision in writing.~~
 - (A) The DSP must promptly notify the DER provider in writing of any deficiencies in the interconnection application or supporting documentation and provide a reasonable timeframe to cure the deficiencies.
 - (B) A DSP must reject an interconnection application if a DER provider submits a notice of termination to the DSP.
 - (C) A DSP may reject an interconnection application if:

- (i) the DSP can demonstrate specific reliability or safety reasons indicating why the DER should not be interconnected at the requested site, which shall be communicated to the DER in writing; or
- (ii) the DER provider fails to timely provide a notice to proceed to the DSP under subparagraph (2)(D) of this subsection.

(2) **Impact Study.** After approval of a DER provider's interconnection application under paragraph (1) of this subsection, a DSP must complete an impact study of the DER detailed in the interconnection application in accordance with this paragraph. In performing an impact study, a DSP must review reasonable methods to safely and reliably interconnect a DER with the distribution system including an evaluation of switching service to a radial feed if practicable and acceptable to the DER provider.

- (A) Upon a determination by a DSP that an interconnection application is complete, and includes all necessary supporting information, the DSP must notify the DER provider in writing of the cost of the impact study. The DSP must proceed with the impact study upon the DSP's receipt of the study fee from the DER provider.
- (B) The DSP must use good-faith efforts to complete the impact study and provide the study results to the DER provider within ninety (90) business days after the DSP's receipt of the study fee.
- (C) The results of an impact study must include:

- (i) a list of all impact study assumptions, including the economic operating limits of the DER and the physical operating capabilities of the DER if the DER provider has specified them;
- (ii) an explanation of any required facilities or upgrades needed to supply the DER at its requested service level;
- (iii) an estimate of the itemized costs of any required facilities or upgrades needed to supply the DER;
- (iv) the amount of such costs the DSP requires to be covered by a contribution in aid of construction (CIAC) or security; and
- (v) a list of additional devices, operating schemes, or other specifications that, as determined by the DSP, may be required for interconnection of a DER described in an interconnection application.

(D) No later than ~~twenty~~thirty (2030) business days following the DER provider's receipt of the impact study results, the DER provider must notify the DSP whether the DER provider plans to proceed with the interconnection process. If the DSP determines that changes requested by the DER to the DER's in-service date, design configuration, equipment, operational requirements, or easement requirements would potentially change the results of the impact study, the DSP may require a new impact study to be performed.

(E) The DSP may require a new impact study to be performed if any of the following actions have not been taken within seventy (70) business days following the DER provider's receipt of the impact study results.

(i) An interconnection agreement has not been executed in accordance with paragraph (3) of this subsection.

(ii) The DER provider has not provided the DSP a CIAC and/or security, ~~if as applicable, a security~~, as required by paragraph (g)(3) of this subsection.

(iii) The DER ~~must demonstrate~~ has not demonstrated it has secured all necessary authorization or ownership to build at the selected site.

(3) **Interconnection Agreement.** After a DSP completes an impact study for the DER, the DSP and the DER provider must execute an interconnection agreement prior to interconnection of the DER.

(A) Within ten (10) business days of the date the DER provider notifies the DSP of its intent to proceed with interconnection of the DER, the DSP must provide an interconnection agreement to the DER provider that includes the estimated in-service date. The in-service date may be contingent on the DER provider submitting evidence to the DSP of the executed easements for construction of the DSPs interconnection facilities and no later than thirty (30) calendar days before the estimated construction commencement date of the DSP's interconnection facilities.

(B) An executed interconnection agreement may be amended by an addendum upon mutual agreement of the DSP and DER provider so long as the

amendments do not conflict with a requirement of this section or §25.212 of this title. The DSP must file with the commission the amended executed interconnection agreement within thirty (30) calendar days of the execution of the amendments. A cover letter must be included summarizing the contents of the amendments.

- (C) If a DSP and DER provider agree to different terms than ~~is~~are provided in the interconnection agreement published in subsection (m) of this section, then the interconnection agreement that is to be executed may be modified to reflect these changed terms so long as the modifications do not conflict with this section ~~or, § 25.212 of this title~~ or ERCOT Protocols, as applicable.
- (D) The DSP must file with the commission all new executed interconnection agreements within thirty (30) calendar days of their execution, including a cover letter identifying any modifications from the interconnection agreement published in subsection (m) of this section. Portions of an executed interconnection agreement may be filed confidentially to protect competitively sensitive commercial or financial information.
- (E) The DSP may terminate an executed interconnection agreement if the DER provider is unable to complete its DER in-service and commissioning requirements within twelve months after the in-service date, as adjusted day-for-day for any delay in the DSP meeting the energization in-service date.

- (h) **Testing.** The DER provider must coordinate with the DSP to complete all required testing of all equipment related to interconnection before the commencement of the in-service date of the DER specified in an executed interconnection agreement.
- (1) The DER provider must provide notice to the DSP at least 15 calendar days before the initial energizing and start-up testing of the DER. The DSP may observe the testing of any equipment and protective systems associated with the interconnection.
- (A) Testing of protection systems must include procedures to functionally test all protective elements of the DER up to and including tripping of the DER at the point of interconnection. Testing must verify all protective set points and breaker trip timing. The DSP may observe the testing of the DER, including installed switchgear and protection systems.
- (B) If modifications to a DER are deemed to be necessary by a DSP or DER provider after testing of the DER under this subparagraph, a DER provider and the DSP must revise and re-submit an amend the interconnection application agreement to incorporate the DSP with information reflecting ~~any necessary or foreseeably necessary~~ modifications to and re-test the DER after the modifications have been made. A DSP may only deem a modification to be necessary if the safe and reliable operation of the DSP's distribution system may be impacted.
- (2) A DSP may require additional testing of the DER on any modifications of the DER or protective functions, after the commencement of commercial operations.
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(d)(2)(F) **Unauthorized modifications.** A DSP may disconnect a DER from the DSP's distribution system upon discovery of an unauthorized modification that was not agreed upon in the interconnection agreement during the interconnection process, and that was not previously authorized by the DSP in accordance with paragraph (h)(~~32~~)(B) of this section or through the process set forth in Section 6 of the standard Distribution Resource Interconnection Agreement. The DSP ~~may~~shall reconnect the DER as stipulated by the executed interconnection agreement. Prior to reconnection and in accordance with subsection (f) of this section, a DSP may require:

- (i) additional studies to be performed;
- (ii) the executed interconnection agreement to be amended; or
- (iii) additional testing in accordance with subsection (h) of this section.

If the modification is a replacement of like-for-like equipment, the DSP shall only require testing under subsection (d)(2)(F)(iii).