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PUC PROJECT NO. 54233

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

**CPS ENERGY'S COMMENTS
REGARDING JUNE 16 AND JUNE 30 WORKSHOPS**

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

The City of San Antonio, acting by and through the City Public Service Board (CPS Energy), submits these comments to the Public Utility Commission of Texas (Commission) in response to the workshops of June 16th and June 30th, and the June 20, 2023 memo from Mariah Benson, Market Analysis Division, in Project No. 54233. CPS Energy separates these comments into three sections: (1) general comments; (2) comments related to the June 16th workshop; and (3) comments related to the June 30th workshop. In addition to the comments offered herein, CPS Energy attaches proposed redline changes to the proposed rules. The proposed redline changes are also summarized in an executive summary attached at the end of this filing.

I. GENERAL COMMENTS

As CPS Energy has noted in this and other dockets,¹ the Commission's authority over investor-owned utilities (IOUs) is meaningfully different from its statutory authority over Municipally-Owned Utilities (MOUs). While the Commission has broad jurisdiction over the rates, cost recovery, and terms of service under which IOUs provide service as distribution service providers (DSPs), the legislature has given municipalities broad regulatory authority over their own DSPs. With respect to governance of a MOU's distribution system, the Commission has limited jurisdiction as provided in PURA §§ 30.002 and 40.055, and Tex. Loc. Gov't Code § 552.001. PURA § 30.002 provides that "this subtitle [related to the regulation of "electric utilities"] does not authorize the commission to ... [r]egulate or supervise a rate or service of a municipally owned utility." Tex. Loc. Gov't Code § 552.001(b) and (d), state that a "municipality may ... operate a[n] [electric] utility system ... and may regulate the system in a manner that protects the interests of the municipality," as well as "prescribe the kind of ... electric appliances

¹ See, e.g., Docket No. 51409 and Project Nos. 54224 and 51603. Especially Interchange filings #41 in Docket No. 51409, #20 in Project No. 54224, and #37 in Project No. 51603. Those filings are incorporated by reference as if fully set forth herein.

that may be used [to connected to the system,] ... inspect those facilities and appliances ... and prescribe the necessary rules ... concerning them.” Similarly, in relation to a MOU that decides to opt into customer choice, PURA § 40.055 affirmatively reserves a MOU’s authority to set all terms of access, conditions, and rates applicable to services provided by the MOU, including nondiscriminatory and comparable rates *for distribution*. Further, PURA § 40.004, explicitly states the Commission’s limited authority over MOUs. That statutory provision, entitled “Jurisdiction of Commission,” states in relevant part: “Except as specifically otherwise provided in this chapter [related to competition of MOUs and river authorities], the commission has jurisdiction over municipally owned utilities only for the following purposes” Such limited purposes are identified and do not include general regulation over an MOU’s distribution system.

Accordingly, when crafting rules to address DERs, the Commission is constrained by the legislature when it comes to MOUs (as well as electric cooperatives). This difference effectively makes it impossible to adopt a single set of DER rules to apply to both IOUs and MOUs. This was recognized by the Commission when it adopted existing rules 25.211 and 25.212, as they do not apply to MOUs. This distinction has been ignored in the currently proposed rules 25.210, 25.211, and 25.212. To avoid conflicts with other regulatory provisions limiting the Commission’s jurisdiction over MOUs, it is appropriate for the Commission to revise proposed rules 25.210, 25.211, and 25.212 to remove their applicability to MOUs, which the current rules already do. To accomplish this, CPS Energy proposes that the rules all be written to apply to “electric utilities” (as the currently adopted rules do) rather than DSPs (as proposed in the new rules 25.210, 25.211, and 25.212).²

Given this, CPS Energy does not offer proposed revisions that would allow these rules to fully apply to MOUs, as any necessary revisions that could be applied to MOUs would result in the wholesale rewriting of each rule, and a significant diminution in the rules’ effectiveness as to other entities. Thus, the comments and revisions offered by CPS Energy are simply designed to ensure that the rules are more effectively drafted for their intended purpose and to address ambiguities or language that could otherwise make the rules difficult to apply. Except for the proposed change that would make the rules applicable to “electric utilities” rather than “distribution service providers,” none of CPS Energy’s proposed changes would cure the

² CPS Energy agrees with Texas Public Power Association’s comments that the Commission may adopt minimal standards that DERs interconnected with ERCOT and selling into the wholesale market are obligated to comply with, regardless of whether they are operating within an MOU or an IOU. However, that does not allow the Commission to impose regulatory requirements on the MOU nor regulate the relationship, including the interconnection terms or requirements, between the MOU and the DER, including DERs that are wholly behind the meter on an MOU’s system and not selling into the wholesale market.

jurisdictional problems that exist in the draft rules in regard to MOUs, and nothing in this filing should be construed as a concession that such rules could lawfully be applied to MOUs.

II. COMMENTS RELATED TO JUNE 16TH WORKSHOP

A. Hosting Capacity

CPS Energy understands that the entity requesting the inclusion of a hosting capacity reporting requirement has withdrawn its request and indicated it is working with IOUs to determine how best to address the concerns underlying the initial request. CPS Energy agrees this is a better approach and, for the reasons discussed at the workshop, would oppose the inclusion of a hosting capacity rule. There are numerous reasons why it would be a poor rule to adopt, including:

1. A hosting capacity analysis is costly to perform. A rough initial estimate to provide this analysis one time for a large utility would be \$1,000,000 or more. It is inappropriate to burden a DSP with these costs when they are incurred solely to benefit a wholesale or generator interconnection, and not the distribution system. This is blatant cost shifting and is inappropriate under PURA, which generally prohibits such cost-shifting and instead requires costs to be borne by the entities causing them.
2. Maintaining on-line maps implicates critical concerns for customer data, confidentiality, and creates vulnerabilities to the safe and reliable operation of the system. This is a critical concern.
3. The data in the report will be quickly outdated, as new customers connect to the system, load increases, system circuitry topology changes, and distributed generation is added.
4. The proposal gives special treatment to DERs that other customers, such as Developers of Residential, Commercial, Industrial and Data Center loads, do not have available to them. This is contrary to the PURA requirement for non-discriminatory treatment, which an MOU is required to comply with. But, making the data available to all customers creates significant security vulnerabilities.
5. Requiring projections for 2-year periods is contrary to many utilities' current practices, in which system improvements are planned over a five-year period.
6. The proposed rule requires dynamic modeling, but there is no definition of what that means. Modeling every hour in the day of every day in the year, 8,760 hours in a year, is not within the current processes, nor is it practicable.
7. Any requirement that a distribution resource plan include recommendations for utilizing the Integration Capacity Analysis to support planning and streamlining of interconnection for DERs, must be based upon some standard procedure developed by ERCOT, and such standards do not currently exist and may never exist.

B. Allowable Expenditure and Contributions in Aid of Construction (CIAC)

The proposed rule needs to clearly indicate that CIAC amounts are not limited to fees explicitly identified in the tariff, and provide that fees in a line extension policy, interconnection agreement, or other policy or agreement referenced in the tariff are part of the Allowable Expenditure. Not all tariffs are the same and it is unrealistic to require all utilities to marshal all foreseeable potential costs and place them into a tariff. Moreover, including such costs in a tariff limits flexibility and essentially applies a uniform approach, when the circumstances of DER interconnections can vary widely. Rather, it should be permissible to include appropriate costs in line extension policies, other written policies of the utility, or the interconnection agreement itself.

III. COMMENTS RELATED TO JUNE 30TH WORKSHOP

A. 25.210 Rule Changes

There are many changes that CPS Energy proposes to the rules discussed at the June 30, 2023, workshop, and CPS Energy will not set those out in these comments, other than to include them in the redline changes proposed (and the executive summary of those redline changes). But, one category of changes worth mentioning relates to the pre-screen study requirements. The prescreening study requirements should be changed to focus on whether the DER's requested "capacity" can be "accommodated" (not facilitated) by the utility's existing substation and circuit facilities, and should take into account other utility applications, in addition to other customer service requests and reserved capacity for planned projects in development queue. Further, potential limitations to DER interconnection could extend beyond the substation, including limited circuit and transformer capacity in the field or planned future projects or existing customer needs, and the rule needs to be changed in various ways to reflect these considerations. Other proposed changes to the rules are identified in the redline changes attached to this filing.

B. Interconnection Agreement

Regarding a DER that is an energy storage resource, it is important to keep in mind that an Interconnection Agreement (IA) is NOT an Energization Agreement. The IA simply determines the necessary steps and terms for the safe interconnection of facilities. Energization is determined by the service request and service agreement or tariff under which the entity takes service. While an IA is necessary for such DER before service can be taken, it is NOT the only required basis for service. A DER/energy storage resource will typically need two additional service agreements with

a utility: (1) for distribution wheeling service (transmission service at distribution voltage); and (2) for any retail service the DER takes for its own usage for auxiliary plant facilities. Further, for many DERs deployed behind-the-meter, no IA is even necessary; rather an IA often is needed only for DERs selling into the wholesale market.


Further, CIAC issues and references to cost allocation should NOT be in the IA. Cost issues are already the subject of another PUC rulemaking and until that is resolved, language in the IA is premature and cannot properly be addressed. All references to CIAC should be removed from the IA or should be allowed to be addressed through negotiation by the parties unless and until the Commission adopts rules addressing CIAC. Anything other than that strays into potentially deciding issues related to costs in this proceeding when that is not the purpose of the proceeding.

IV. CONCLUSION

In conclusion, CPS Energy recommends that Draft Rules 25.210, 25.211, and 25.212 be revised to apply only to electric utilities, as the current DER rules do. In addition, CPS Energy provides the attached proposed redline changes to the draft rules.

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PUC PROJECT NO. 54233

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| TECHNICAL REQUIREMENTS AND INTERCONNECTION PROCESSES FOR DISTRIBUTED ENERGY RESOURCES (DERS) | § § § | PUBLIC UTILITY COMMISSION OF TEXAS |
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**EXECUTIVE SUMMARY OF CPS ENERGY'S
REDLINE COMMENTS IN PROJECT NO. 54233**

The City of San Antonio, acting by and through the City Public Service Board (CPS Energy), provides the following executive summary to its redline comments to the rule language discussed in the June 16th and 30th workshops in Project No. 54233.

- Revise applicability to make 25.210 applicable to “electric utilities” rather than “DSPs.”
- Revise 25.210(e)(1)(A) to show that the proper test is whether DER’s requested “capacity” can be “accommodated” (not facilitated).
- Revise 25.210(e)(1)(B)-(C) to include limitations to DER interconnection beyond substations.
- Revise 25.210(e)(2) to indicate the study “must account for, at a minimum” completed DER applications for interconnection.
- Revise 25.210(e)(3) to allow 30 business days for the pre-screen study to be completed.
- Revise 25.210(f)(1)(B) to reflect that “An interconnection application is deemed withdrawn if a DER provider submits a notice of termination to the utility.”
- Revise 25.210(f)(1)(C) to include an additional basis for rejection if the utility cannot accommodate the DER’s requested capacity due to the utility’s reserved capacity necessary to support the utility’s planned projects in the development queue.
- Revise 25.210(f)(2)(C)(i) to delete economic operating limits as a consideration.
- Revise 25.210(f)(2)(D) and 3(A) to provide that the notice to the utility must be in writing.
- Revise 25.210(f)(3)(A) to provide that the utility has 20 business days to provide the Interconnection Agreement after the impact study is completed, and also to ensure that the DER provides each of the following upon execution of the Interconnection Agreement: (a) evidence of all necessary easements, (b) any CIAC payment, and (c) any required security deposit, and provide that the utility’s obligation to begin construction commences no later than 60 days after receipt of all such items.
- Revise 25.210(h) to delete “initial energizing” from the text.
- Revise 25.210(h)(1)(B) to add language “or if the modifications are otherwise required by law, including local ordinance or codes” to account for requirements by other regulatory bodies.

Proposed Redline Changes

Redline Discussion Draft Language for Agenda Items 1-5

§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),~~electric utilities, 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~~utility'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 or explicitly referenced in the ~~DSP's~~utility's tariff unless a different amount or calculation is otherwise provided by commission rules. As set out elsewhere in this rule, a utility may require a contribution in aid of construction (CIAC) in excess of amounts identified in the Allowable Expenditure, and fees in a line extension policy, interconnection agreement, or other policy or agreement referenced in the utility's tariff may be included in the Allowable Expenditure.
- (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 utility'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~~utility 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~~utility'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 DSPutility using the form prescribed by the commission.
- (d) **Terms of service.** A DSPutility must provide service to an interconnected DER under the following terms.
- (1) **Prohibited costs.** A DSPutility must not charge a DER provider charges assessed for the disconnection of a DER at the order of a DSPutility in accordance with subparagraph (3)(D)-(E) of this subsection.
- (2) **~~DSP~~Utility service obligations.** A DSPutility must comply with the requirements of this paragraph when providing service to a DER interconnected to the DSP'sutility's distribution system.
- (3) **Disconnection and reconnection.** A DSPutility may ~~only~~ disconnect a DER from the DSP'sutility's distribution system only 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 DSPutility 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'sutility's or DER provider's personnel, to the safety of the DSP'sutility's customers, or to the reliability and continuity of electric service, then the DER provider must immediately notify the DSPutility.

When a DSPutility becomes aware of an issue that represents a threat to public safety, to the safety of the DSP's utility's or DER provider's personnel, to the safety of the DSP's utility's customers, or to the reliability and continuity of electric service then the DSPutility 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 DSPutility 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 DSPutility 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 DSPutility must have an inspector verify such compliance as quickly as is reasonably practicable.

(D) **System emergency causing an unscheduled outage.** A DSPutility 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 utility's distribution system, the DSP utility may temporarily disconnect a DER to make immediate repairs. As quickly as is reasonably practicable, the DSP utility must notify the DER provider of the unscheduled outage and reconnect the DER.

(E) **Scheduled outages for routine maintenance, repairs, and modifications.**

A DSP utility may temporarily disconnect a DER from the DSP's utility's distribution system for a scheduled outage, provided that the DSP utility issues notice in writing to the DER provider at least seven business days prior to such a disconnection. The DSP utility must reconnect the DER as quickly as is reasonably practicable following any such service interruption.

(F) **Unauthorized modifications.** A DSP utility may disconnect a DER from the DSP's utility's distribution system upon discovery of a modification that was not previously authorized by the DSP utility in accordance with paragraph (h)(3) of this section. The DSP utility 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 utility 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.

(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~~utility that is also a TDU must file a tariff amendment with the commission for approval to comply with this section. A ~~DSP~~utility that is not also a TDU must amend its tariffs, as appropriate, to comply with this section. A ~~DSP~~utility 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~~sutility'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~~utility 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~~utility 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 DSPutility must acquire and construct any facilities necessary to interconnect a DER in accordance with good utility practice.

(A) Notwithstanding any other law, a DSPutility may require a CIAC from a DER provider for the reasonably estimated costs that a DSPutility 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 utility's substation, and for the costs of any acquisitions of the additional facilities that would affect the tax liability of a DSPutility. Such reasonably estimated costs are limited to those specified in an executed interconnection agreement and, if applicable, exceed the allowable expenditure amount. The DSPutility must provide the DER provider an estimation of the itemized costs to be collected through the CIAC.

(B) Notwithstanding any other law, a DSPutility may require a DER provider to post a security deposit or performance bond for the costs of planning, licensing, and constructing new or updated distribution or transmission facilities not covered by the CIAC.

(i) A DSPutility must return ~~the~~any security deposit to a DER provider within 10 business days after a DER provider notifies a DSPutility in writing of commencement of commercial operation and requests the return of the security deposit.

- (ii) If a DER provider abandons a site and new distribution or transmission facilities are no longer required, a DSPutility may retain as much of the security deposit as is required to recover the costs the DSPutility incurred in planning, licensing, and construction activities related to the planned new or upgraded distribution or transmission facilities.
- (C) A DSPutility 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 deposit or performance bond.
- (D) Within 180 calendar days of the date the DSPutility is notified that the DER is commencing commercial operations, a DSPutility must provide invoices to the DER provider for the facilities the DSPutility 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 DSPutility must reimburse the DER provider all excess funds the DER provider paid the DSPutility.
- (4) **Financial assurance for removal and disposal of DER.** Notwithstanding any other law, a DSPutility may require additional financial assurance, in addition to the CIAC and security deposit or performance bond 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, performance bond, or a cash deposit to be held by the DSPutility in a segregated cash account.

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

(B) If the DER provider does not remove the DER and all 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 DSPutility may use the financial assurance to cover the costs of removing and disposing of the DER and related equipment and facilities.

(C) The DSPutility 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 DSPutility the required financial assurance prior to the DER commencing commercial operations.

(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 DSPutility under subsection (f) of this section. A DSPutility must complete pre-screen study in accordance with good utility practice.

(1) Results from a pre-screen study for DER must:

- (A) indicate whether the requested ~~exporting level, and as applicable charging level,~~capacity of the DER can be ~~facilitated~~accommodated at the ~~DSP's~~utility's distribution feeder and substation, given known applications in place or under interconnection, without requiring significant transmission system upgrades;
 - (B) identify known potential limitations ~~at in the DSP's substation~~in the utility's system for the interconnection of the DER; and
 - (C) list the known additions or upgrades needed to accommodate interconnection of the DER ~~at the DSP's substation~~, including, but not limited to, a new feeder, substation, an additional bay, or transformer replacement.
- (2) When conducting a pre-screen study, the ~~DSP~~utility must account for, at a minimum, 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~~utility must perform a pre-screen study. A pre-screen study is undertaken as of a stated date and a ~~DSP~~utility must use best efforts to provide the results of a pre-screen study within ~~thirty twenty-five (3025)~~ business days of the date the pre-screen study request is received by the ~~DSP~~utility. 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~~utility, or if the total number of pre-screen studies pending with the ~~DSP~~utility exceeds ten sites. If a ~~DSP~~utility cannot provide a pre-screen study within ~~thirty twenty-five (3025)~~ business days, the ~~DSP~~utility 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 impact study. A pre-screen study will not, on its own, reserve or hold capacity on the distribution system.

(f) **Interconnection Process.** A DSPutility must permit a DER provider to interconnect to the DSPutility'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 DSPutility a completed and fully-funded interconnection application and all supporting documentation necessary for a DSPutility to conduct an impact study as required by paragraph (2) of this section. A DSPutility must approve or deny the interconnection application and promptly notify the DER provider of the decision in writing.

- (A) The DSPutility must promptly notify the DER provider 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~~ An interconnection application is deemed withdrawn if a DER provider submits a notice of termination to the DSPutility.

- (C) A DSPutility may reject an interconnection application if:

- (i) the DSPutility can demonstrate specific reliability or safety reasons indicating why the DER should not be interconnected at the requested site; ~~or~~

- ~~(ii)~~ the utility cannot accommodate the capacity requested by the DER because of the utility's existing reserved capacity necessary to support planned projects in the utility's development queue; or
- ~~(iii)~~ the DER provider fails to timely provide a notice to proceed to the DSPutility 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 DSPutility must complete an impact study of the DER detailed in the interconnection application in accordance with this paragraph. In performing an impact study, a DSPutility 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 DSPutility that an interconnection application is complete, and includes all necessary supporting information, the DSPutility must notify the DER provider in writing of the cost of the impact study. The DSPutility must proceed with the impact study upon the ~~DSP's~~utility's receipt of the study fee from the DER provider.
- (B) The DSPutility 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~~utility'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~~Utility 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~~Utility, may be required for interconnection of a DER described in an interconnection application.
- (D) No later than twenty (20) business days following the DER provider's receipt of the impact study results, the DER provider must notify the ~~DSP~~Utility in writing whether the DER provider plans to proceed with the interconnection process. If the ~~DSP~~Utility determines that changes 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~~Utility may require a new impact study to be performed.
- (E) The ~~DSP~~Utility 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~~utility a CIAC and, if applicable, a security, as required by paragraph (g)(3) of this subsection.
 - (iii) The DER must demonstrate it has secured all necessary authorization or ownership to build at the selected site.
- (3) **Interconnection Agreement.** After a ~~DSP~~utility completes an impact study for the DER, the ~~DSP~~utility and the DER provider must execute an interconnection agreement prior to interconnection of the DER.
- (A) Within ~~twentyten~~ (2040) business days of the date the DER provider notifies the ~~DSP~~utility in writing of its intent to proceed with interconnection of the DER, the ~~DSP~~utility must provide an interconnection agreement to the DER provider that includes the estimated in-service date. The in-service date, and the utility's obligation to commence construction, may be contingent on the DER provider submitting to the utility (1) evidence to the DSP of the executed that all necessary easements for construction of the DSP's interconnection facilities and have been obtained, (2) any required CIAC payment, and (3) any required security deposit. The utility shall commence construction no later than thirty (30) calendar 60 days before the estimated construction commencement date of the DSP's interconnection facilities after receipt of all such items.
 - (B) An executed interconnection agreement may be amended by an addendum upon mutual agreement of the ~~DSP~~utility 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~~Utility 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~~Utility and DER provider agree to different terms than is 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.
- (D) The ~~DSP~~Utility 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~~Utility 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.

- (h) **Testing.** The DER provider must coordinate with the DSPutility 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 DSPutility at least 15 calendar days before ~~the initial energizing and start-up~~ testing of the DER. The DSPutility 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 DSPutility 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 DSPutility or DER provider after testing of the DER under this subparagraph, a DER provider must revise and re-submit an interconnection application to the DSPutility with information reflecting any necessary or foreseeably necessary modifications to the DER. A DSPutility may ~~only~~ deem a modification to be necessary only if the safe and reliable operation of the DSP's utility's distribution system may be impacted or if the modification is otherwise required by law, including local ordinance or codes.
- (2) A DSPutility 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~~utility may disconnect a DER from the ~~DSP~~utility'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~~utility in accordance with paragraph (h)(3) of this section. The ~~DSP~~utility 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~~utility 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.