

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

THE CITIZENS UTILITY BOARD and)	
THE ENVIRONMENTAL LAW AND)	
POLICY CENTER)	
)	
Petition to Initiate Rulemaking With Notice)	Docket No. 14-0135
and Comment for Approval of Certain)	
Amendments to Illinois Administrative)	
Code Part 466 and 467 Concerning)	
Interconnection Standards for Distributed)	
Generation)	

**BRIEF ON EXCEPTIONS OF THE ENVIRONMENTAL LAW & POLICY CENTER,
THE CITIZENS UTILITY BOARD, AND THE INTERSTATE RENEWABLE ENERGY
COUNCIL, INC.**

The Environmental Law & Policy Center (“ELPC”), the Citizens Utility Board (“CUB”) and the Interstate Renewable Energy Council, Inc. (“IREC”) (collectively the “Joint Petitioners”) respectfully file this Brief on Exceptions in response to the ALJ’s Supplemental Proposed First Notice Order (Proposed Order) of August 21, 2015 and the subsequent ruling extending the schedule for Briefs and Reply Briefs on Exceptions.

As set forth in detail in the substantial record in this case, the purpose of this proceeding is to amend and update portions of Part 466 and portions of Part 467 of the Commission’s rules for the electric interconnection of distributed generation facilities. These amendments are necessary to prepare Illinois for much higher levels of distributed generation (“DG”) as a result of falling solar prices, expanded legislative and policy support, and enhanced grid capability as a result of advanced metering investments under the Energy Infrastructure Modernization Act (“EIMA”). The proposed amendments are drawn from existing best practices at the Federal Energy Regulatory Commission (“FERC”) and other recently-adopted state rules, and are consistent with the Commission’s statutory directive to consider “current best practices for

interconnection of distributed generation”¹ and the EIMA’s goal to facilitate customer adoption of emerging technologies and practices such as distributed generation.² These changes will help streamline and expedite the interconnection process for more Illinois consumers while still ensuring the safety and reliability of the distribution grid as a paramount objective.

ELPC, CUB, and IREC appreciate the ALJ’s careful attention to detail and consideration of the technical record in this case, which is built upon extensive and rigorous studies and regulatory proceedings at FERC and in other states, including Illinois, which collectively involved hundreds of stakeholders, national laboratories, federal agencies, and many of the nation’s largest electric utilities and industry associations. While the parties have managed to agree on the majority of the rule changes proposed in this docket, the Joint Petitioners offer the following suggestions to correct, clarify, and further improve certain aspects of the Proposed Order and rules that remain in dispute. The section numbering below corresponds to the section numbering in the Proposed Order.

I. Introduction, Procedural History, Background, and the Need for the Amendments.

Section I of the Proposed Order traces the procedural history, purpose, and need for amended interconnection standards in Illinois, including discussion of global solar market trends and Illinois-specific policy developments that will result in increasing penetration of customer distributed generation in the coming years. While the parties have different points of view on the speed at which the distributed generation market will grow in Illinois, the record reflects that changes in DG markets can occur very rapidly and that problems can arise if states are not prepared for this rapid growth. The Proposed Order correctly concludes that it would be prudent

¹ 220 ILCS 5/16-107.5(h).

² 220 ILCS 5/16-108.6(a).

to update and improve the Illinois interconnection standards now so that Illinois is well-prepared for inevitable DG market growth, particularly in light of the PUA’s mandate to consider “best practices,”³ the ongoing push for smart grid infrastructure improvement in Illinois, and developments at the Illinois Power Agency that will support the development of distributed generation markets.

II. Section 466.20 Definition of Minor System Modifications – No Construction Screen

This Section proposes an alternative process to allow certain projects requiring only “minor” upgrades to the distribution system to proceed on an expedited basis without being required to pay for and undergo a lengthy and unnecessary Level 4 review. The Joint Petitioners suggest only two minor changes to the ALJ’s proposed resolution of this issue.

First, the Proposed Order’s adoption of ComEd’s proposed 45 business day timeline for preparing a cost estimate and construction schedule is not reasonable. The result of this change would allow more time for the utility to prepare a cost estimate and construction schedule for these relatively minor upgrades than the existing rules currently allow the utility to prepare a full Facilities Study under Level 4. It does not make sense to provide utilities with more time for a simple process than the time currently provided for the more complex and involved Facilities Study process. ComEd did not indicate that it has any trouble meeting the timeframes required for preparation of a Facilities Study under the current rules, and ComEd’s request for a timeframe longer than the Facilities Study is unreasonable and also conflicts with the purpose of this section to identify and expedite projects that are relatively straightforward and simple. As explained in the record, the Joint Petitioners’ proposed 15 business day and 30 business day

³ 220 ILCS 5/16-107.5(h).

timelines⁴ are reasonable in comparison to the timeframes used in other states as well as existing timelines within 83 Ill. Admin. Code Part 466.⁵ Therefore, the Joint Petitioners urge the Commission to reject ComEd's proposed 45-day timeline and adopt the alternative 15- and 30-day timelines proposed by the Joint Petitioners below.

Second, the proposed Commission Analysis and Conclusion at page 14 of the Proposed Order includes a statement from Ameren regarding utility costs for review of distributed generation applications that are "borne by other ratepayers." It is not clear why Ameren's assertion regarding the costs of reviewing distributed generation applications relates to a discussion of appropriate timeframes for preparing a cost estimate. Preparing an estimate in a reasonable timeframe does not increase costs for other ratepayers. The Joint Petitioners thus propose striking this sentence.

Suggested Replacement Language

The Joint Petitioners respectfully request the Commission to revise the second full paragraph on page 14 of the Proposed Order as follows:

Further, the Commission adopts ~~ComEd's~~ the Petitioners' timeframes. With the anticipated increase in applicants, the utilities must have time to fully review all applications. This can be accomplished by allowing the utilities 15 business days to develop a non-binding good faith cost estimate and construction schedule for Minor System Modifications, and 30 business days (the existing Facilities Study timeline) for more than Minor System Modifications. ~~Also, as pointed out by Ameren, utility costs that are incurred to review distributed generation applications are borne by other ratepayers. ComEd's~~ The Petitioners' proposed timeframes are ~~not un~~reasonable and are included in the attached appendix. ~~Also, although ComEd and Ameren are the only participating utilities, as written the rules would apply to any electric utility subject to the jurisdiction of the Commission.~~

⁴ See 466.100(b)(4)(B) & (C); 466.110(c)(2) & (3); 466.120(b)(2) & (3).

⁵ See Joint Pet. Ver. Init. Comments at 21-22.

III. Section 466.30 Waiver

The Joint Petitioners take no exception to this Section.

IV. Section 466.50 Pre-Application Report

The Proposed Order notes that “the proposed Section 466.50(b)(8) refers to Section 466.100(f), but it appears that it should refer to Part 466.110(f).”⁶ The Joint Petitioners agree that the appropriate reference is to 466.110(f) and suggest that the reference be changed accordingly.

V. Section 466.60

The Joint Petitioners take no exception to this Section.

VI. Section 466.70

A. Section 466.70(h) External Disconnect Switch

An external disconnect switch (“EDS”) is a device that allows a utility line worker to disconnect a customer’s DG system from the exterior of a home or building. While these devices are typically required for larger DG systems, many states and utilities have determined that the devices are redundant and impose unnecessary costs for smaller inverter-based DG systems and therefore have eliminated the requirement for smaller inverter-based systems. The Joint Petitioners believe that the overwhelming weight of the evidence in the record supports eliminating the EDS requirement for inverter-based systems under 25 kW.⁷

The Joint Petitioners take issue with the Proposed Order’s suggestion that the lack of evidence regarding the use of disconnect switches in Illinois means that they are not being

⁶ Proposed Order at 16.

⁷ See Joint Pet. Ver. Init. Comments at 35-37; Joint Pet. Ver. Rep. Comments at 7-11; Joint Pet. Ver. Sur. Comments at 8.

“unnecessarily required.”⁸ To the contrary, the fact that the utilities were unable to point to a single instance of the use of an EDS in Illinois tends to corroborate the extensive evidence in the record that they are not necessary for smaller, inverter-based systems. Thus, the Joint Petitioners strongly support the Proposed Order’s requirement for utilities to report to the Commission how often and in what circumstances customer EDS switches are utilized in order to help the Commission make a more informed decision about this policy choice in the future.

Suggested Replacement Language

The Joint Petitioners respectfully request the Commission revise the last two paragraphs on page 20 of the Proposed Order as follows:

The current rule states that, “EDCs may require that distributed generation facilities have the capability to be isolated from the EDC.” In other words, it is at the discretion of the utility to decide whether to require an external disconnect switch which disconnects the distributed generation facility from the grid. ~~The record does not show that this is being unnecessarily required of distributed generation applicants. Indeed, †~~There is no evidence regarding the use of external disconnect switches in Illinois. The Commission is troubled by a proposal that bans a utility from requiring something that may be necessary for safety reasons, but is also troubled by a proposal to maintain an EDS requirement if it is not truly necessary for safety reasons. If a utility believes an external disconnect switch is necessary, the Commission is reluctant to remove that option at this time, but will continue to review the evidence to determine whether the requirement should be maintained in the future.

~~As stated, there is no evidence that external disconnect switches are being needlessly required.~~ ComEd and Ameren indicate that they do not keep records of when customers’ EDSs are utilized. Apparently, Ameren requires the operation of an EDS in all circumstances when a “line clearance” is requested by its line workers on a section of line that has distributed generation units interconnected – for both emergency and maintenance work. Ameren Supplemental Comments at 6. The Commission directs ComEd and Ameren to report to the Commission how often and in what circumstances customer EDS switches are utilized in order to make an informed decision in the future.

⁸ See Proposed Order at 20.

B. Section 466.70(i) No Additional Requirements

The Joint Petitioners take no exception to this Section.

C. Section 466.70(m), (n), and (o) Electronic submittal

The Joint Petitioners take no exception to this Section.

VII. Part 466.90 Determining the Review Level

A. Section 466.90(a) increasing the Level 1 Size Limit to 25 kW

The Joint Petitioners take no exception to this Section.

B. Part 466.90(b) Refining Level 2 Size Limit by Incorporating a Table

The Joint Petitioners support the determination in the Proposed Order that a two column table-based approach is appropriate for determining Level 2 eligibility.⁹ In response to the final sentence in this section addressing the lack of clarity regarding the reference to non-existent “Section 466.90(b)(6),” we suggest that this provision should refer to the sections containing the Level 2 size limits: 466.90(b)(2). Therefore we suggest revising the rule provision accordingly and striking this final paragraph.

VIII. Queue Position

The Joint Petitioners take no exception to this Section.

⁹ Proposed Order at 29-30.

IX. Section 466.110(f) Supplemental Review

The Joint Petitioners support the Proposed Order's adoption of "supplemental review" procedures consistent with the process contained in the FERC SGIP.¹⁰ Supplemental review is intended to help determine whether projects can be interconnected safely and reliably without having to go through unnecessary and expensive studies. FERC determined that the supplemental review process set forth in Order 792 "will enhance transparency and consistency ... and thus ensure that interconnection remains just and reasonable and not unduly discriminatory, particularly in regions with increasing penetrations of Small Generating Facilities."¹¹ FERC further concluded that the process "retains sufficient flexibility ... to meet the needs of regions that do not have significant penetrations of Small Generating Facilities."¹²

One important element of the supplemental review process adopted by FERC is the inclusion of a "100% of minimum load" screen to determine if there is a potential for unintentional islanding of DG equipment. FERC discusses the "minimum load" screen beginning at page 70 of Order 792, ultimately determining that the minimum load screen is "sufficiently conservative" and, when viewed together with the other two supplemental review screens "provide[s] the flexibility to identify circumstances when additional studies may be required while avoiding an unjust and unreasonable increase in expense and delay in interconnection."¹³

Importantly, the supplemental review provisions in the new FERC rules provide flexibility for utilities to estimate minimum load in circumstances where the minimum load cannot be directly measured.¹⁴ The rules provide that actual data should be used when available,

¹⁰ Supplemental Proposed Order at 38-40.

¹¹ FERC Order 792 at 69.

¹² *Id.* at 70.

¹³ *Id.* at 81.

¹⁴ See FERC § 2.4.4.1; see also FERC Order 792 ¶ 144, at p. 83 ("The adopted reform gives the Transmission Provider the flexibility to calculate, estimate or determine minimum load if data are not available. Further, the

but also allow for calculation, estimation or determination where possible.¹⁵ If data is not available, utilities may estimate it pursuant to well established methods.¹⁶ Finally, if a utility believes it cannot safely estimate the minimum load, it is permitted to have an applicant fail this screen, so long as it provides the reason to the customer. As the record shows, this approach, which gives utilities options based on the particular situation faced by each applicant, is being applied in many places now, and is appropriate in Illinois as well. It protects system safety and allows for flexibility in identifying the appropriate method for determining minimum load as utilities gain experience and technological advances are deployed.

The Proposed Order concludes that it would be “inappropriate” to allow for an estimate of minimum load where the relevant data is not available, but the Order does not explain why it reaches this conclusion nor does it discuss or attempt to distinguish FERC’s existing practice to allow for the estimation of minimum loads in appropriate circumstances.¹⁷ The record shows the rules adopted by FERC, and in place in California, Massachusetts and Ohio, already take into account the utilities’ apparent concerns regarding estimation.¹⁸ If data is available, as it should be

language allows the Transmission Provider not to perform the Minimum Load Screen if data are unavailable or if it is unable to calculate, estimate or determine minimum load.”).

¹⁵ *Id.*

¹⁶ See Joint Pet. Ver. Rep. Comments at 25 (citing NREL Technical Report 5500-54063, *Updating Interconnection Screens for PV System Integration*, at 7 (Feb. 2012), at 7, available at <http://www.nrel.gov/docs/fy12osti/54063.pdf>, which states that “minimum load can be estimated based on standard load profiles for various customer classes that many utilities maintain and update on an annual basis.” and NREL, *Distributed Generation Interconnection Collaborative, Minimum Daytime Load Calculation and Screening*, available at: http://www.nrel.gov/tech_deployment/dgic.html which includes a specific technical session for utilities that helps identify methods for calculating minimum load.).

¹⁷ Proposed Order at 38.

¹⁸ See Joint Pet. Ver. Init. Comments at 27-34 (indicating that CA, MA and OH have adopted the same supplemental review process in place at FERC in this respect, which requires the use of available data, but allows for the estimation of minimum load or the rejection of an applicant if such estimation is not possible); see also FERC SGIP § 2.4.4.1 (“Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 2.4.4.”).

in many cases given the proliferation of advanced metering in Illinois, utilities should use that data. This mandate is in keeping with the Commission's desire to see the utilization of the investment in smart grid technology. However, in circumstances where this data is not yet available, the Commission should provide flexibility for utilities to provide an estimate of minimum load in a manner similar to FERC and the other states discussed in the record.

Suggested Replacement Language

The Joint Petitioners respectfully suggest the following modifications to this section on pages 38 through 39:

As proposed, it appears as though the 100% of minimum load could be based on actual data or an estimate. Indeed, Ameren complains that the proposed rule not only sets the screen at 100% of minimum load, but also allows an estimate of minimum load if the relevant data is not available. ~~The Commission agrees that this is inappropriate.~~ With the introduction of smart meters throughout ComEd's and Ameren's territory, this screen ~~should only~~ can be used if the actual minimum load information is available. If actual minimum load data is not available, the rule allows the utility to estimate the load if reasonable information exists to reliably do so. If it does not, an applicant would fail the Supplemental Review screen. The utility does not have to use the minimum load screen if it cannot be reasonably determined. ~~In other words,~~ An applicant should be informed whether the minimum load data is available before paying for the Supplemental Review. With this modification to the Proponents' proposed Supplemental Review, the Commission finds the utilities' concerns to be addressed while at the same time utilizing the data that is generated by AMI meters.

X. kW v kVA Unit

The Joint Petitioners agree with the assessment in the Proposed Order that the proposal to modify certain references from "kVA" to "kW" throughout the rules is reasonable and not disputed.¹⁹ The Proposed Order notes that some kVA references remain and questions whether

¹⁹ Proposed Order at 40.

Petitioners intentionally did not change all references to kW.²⁰ The proposal to modify some but not all references to kVA reflects discussions with other parties and the Joint Petitioners continue to support it.²¹ We note, however, that kW is used consistently throughout the FERC SGIP without reference to kVA.

CONCLUSION

The Joint Petitioners appreciate the Commission's careful consideration of the important issues in this docket. The full record overwhelmingly supports the proposed rules with the minor modifications suggested by the Joint Petitioners here, and the Proposed Order reflects the substantial amount of work that all parties and Commission Staff have put into this docket through workshops and several rounds of verified comments over the past 18 months. The Joint Petitioners respectfully request that the Commission move this docket forward expeditiously so that Illinois customers can take advantage of interconnection best practices that will help reduce costs while continuing to ensure the safety and reliability of electricity service in Illinois.

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²⁰ Proposed Order at 40.

²¹ See Joint Pet. Ver. Init. Comments at 39.

Respectfully submitted,



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