

**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

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

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**STAFF VERIFIED REPLY COMMENTS**

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**NOW COMES** the Staff of the Illinois Commerce Commission ("Staff"), by and through its attorneys, and pursuant to Section 200.800 of the Illinois Administrative Code, (83 Ill. Adm. Code 200.800), and the schedule the Administrative Law Judge ("ALJ") set at in her Order of July 31, 2014, respectfully submits its Verified Reply Comments in the above-captioned matter.

**I. Introduction**

Staff's Verified Reply Comments will respond to the proposals put forth by Commonwealth Edison Company ("ComEd), Ameren Illinois Corp. ("AIC") (jointly, the "utilities") and the Citizens Utility Board ("CUB"), Environmental Law & Policy Center ("ELPC"), and Interstate Renewable Energy Council, Inc. ("IREC") (jointly, the "Petitioners").

Staff, Petitioners and the utilities all believe the existing interconnection rule has been working well. (Staff Initial, 4; Joint Initial 7; ComEd Reply, 1-2; AIC Reply, 1.)

Despite that fact, the Petitioners contend that their proposed is necessary to update portions of Part 466 and portions of Part 467 of the Commission's rules for the electric interconnection of distributed generation facilities. Petitioners suggest several changes to the existing rule. The utilities and Staff do not object to most of these changes. Following review of ComEd and AIC's comments, Staff has identified six proposed changes to the rule that do not enjoy universal support. With the comments below Staff attempts to briefly describe each contested proposed addition to the rule, explain the positions of each party, and provide Staff's recommendation regarding that proposal.

## **II. Issues**

### **1. Minor System Modifications**

Within Section 466.20 of the proposed rule, the Joint Responders propose the following definition:

"Minor System Modifications" means modifications to an EDC's Electric Distribution System located between the service tap on the distribution circuit and the meter serving the Interconnection Customer, or other minor system changes that the EDC estimates will entail less than four hours of work and \$1000 in materials.

In its comments, ComEd finds that the definition is acceptable if the restriction to four hours of work and \$1000 in materials is deleted. It argues that it is likely that all applications requiring utility construction would fail this definition. (ComEd Verified Comments, p. 4)

Joint Responders explain in their Joint Verified Reply Comments that their intent in defining "Minor System Modifications" is to include both any modification between the service tap and the meter as well as changes on the utility's side of the service tap that require less than four hours of labor and \$1000 in materials. (Joint Reply, 5.) In the

Joint Responders' interpretation, modifications to the EDC's facilities between the service tap and the meter will be "Minor System Modifications" regardless of the amount of work and cost involved.

Staff does not oppose the Joint Responders' proposed definition.

## **2. External Disconnect Switch**

The Joint Responders take issue with current provision Section 466.70(h), which allows an EDC to determine whether an applicant must provide a means to isolate on-site generation from the EDC's distribution system for inverter-based systems with capacity less than 25 kW. (Joint Reply, 7.) Section 466.70(h) currently provides:

h) EDCs may require that distributed generation facilities have the capability to be isolated from the EDC. For distributed generation facilities interconnecting to a primary line, the isolation shall be by means of a lockable, visible-break isolation device accessible by the EDC. For distributed generation facilities interconnecting to a secondary line, the isolation shall be by means of a lockable isolation device whose status is indicated and is accessible by the EDC. The isolation device shall be installed, owned and maintained by the owner of the distributed generation facility and located electrically between the distributed generation facility and the point of interconnection. A draw-out type of circuit breaker accessible to the EDC with a provision for padlocking at the drawn-out position satisfies the requirement for an isolation device.

The Joint Responders argue that an isolation device for inverter-based systems below 25 kW is not necessary, so for such systems this requirement, if imposed by an EDC, simply adds unnecessary costs. (Joint Reply, 8.)

ComEd, on the other hand, points out that the existing language provides EDC's flexibility to require an isolation device on inverter-based generation of less than 25 kW, which is consistent with the practice in other states, including California. (ComEd Initial, 15.) Similarly, AIC points out that the change proposed by the Joint Responders would preclude the utilities from requiring an isolation device in instances where that

equipment is necessary to protect the safety of the utility's employees or the reliability of the distribution system. (AIC Initial, 3.) AIC also points out that, when compared to the overall cost of a typical Distributed Generation ("DG") installation, the \$500 installed-cost for an external disconnect switch will not be the sole cause an installation does not move forward. (AIC Initial, 4.)

Staff finds that, with a small change, the existing language in the rule should remain. Staff is concerned about a blanket ban on an EDC requiring an isolation device for inverter-based systems below 25 kW in the rule. No two DG installations are exactly the same. In addition, a visible disconnect switch can protect EDC workers if a DG owner modifies the components of her DG facility over time, which can inadvertently affect its behavior. The EDC is responsible for providing safe and reliable service to all of its customers, and if it believes a DG facility could jeopardize this responsibility, the EDC must be able to isolate that DG facility. Staff is sensitive to the Joint Responders concerns about unnecessary costs, but the EDC's need to require a means to isolate a DG for safety and reliability reasons should not be prohibited by rule. Even if these disconnects are rarely used, it does not indicate they have no value. Similar to a fire extinguisher, they are not often relied upon, but that does not mean that they are unnecessary and without value.

Staff, accordingly, recommends the following modification to Section 466.70(h) from the current rule, in lieu of the Joint Responders proposal, to specify that the EDC should require an EDS for secondary connections only where another satisfactory means to isolate, such as a self-contained meter, are unavailable.

h) EDCs may require that distributed generation facilities have the capability to be isolated from the EDC. For distributed generation facilities

interconnecting to a primary line, the isolation shall be by means of a lockable, visible-break isolation device accessible by the EDC. For distributed generation facilities interconnecting to a secondary line through a self contained meter, the EDC's removal of the self-contained electric meter may satisfy this capability. If the EDC demonstrates that removal of the self contained meter, or use of a different isolation device on the premise, will not provide adequate isolation, the isolation shall be by means of a lockable isolation device whose status is indicated and is accessible by the EDC. The isolation device shall be installed, owned and maintained by the owner of the distributed generation facility and located electrically between the distributed generation facility and the point of interconnection. A draw-out type of circuit breaker accessible to the EDC with a provision for padlocking at the drawn-out position satisfies the requirement for an isolation device.

### **3 No Additional Requirements**

The Joint Responders propose Section 366.70(i) to preclude EDC's from imposing requirements beyond those authorized by Part 466. The proposed addition is shown below:

- i) An EDC shall not charge an Applicant any fee or require additional equipment, insurance, or any other controls or tests to obtain approval to interconnect that are not authorized by the provisions in this Part 466.

AIC and ComEd find the language in this subsection to be overly restrictive and that it could cause some site-specific costs to be socialized. (AIC Initial, 4-5; ComEd Initial, 15-16.)

Staff finds that Sections 466.90, 466.100, and 466.110 of the current rule each already contain language very similar to the language that the Joint Responders propose (*i.e.*, Section 466.110 states: "An EDC may not impose additional requirements for Level 2 reviews that are not specifically authorized under this Section unless the applicant agrees.") One of the purposes of Part 466 is to make the responsibilities and cost obligations of the parties clearer. Staff believes that the current rule effectively accomplishes this. Staff is unaware of any disputes involving an EDC imposing

unreasonable requirements on an applicant. Given that similar language already exists so that the Joint Responders concerns are already largely addressed within the current rule, the proposed additional subsection (i) is not warranted.

#### **4 Size limit for Level 2 Review**

ComEd objects to the proposed size increase for consideration under Level 2 review from 2 MW to 3 MW. Joint Responders point out that the projects above 2 MW are still required to pass the relevant technical screens, so they would not be approved under Level 2 unless the EDC found it appropriate to do so.

Staff agrees with the Joint Responders, and agrees that the increase from 2 MW to 3 MW for the upper limit of Level 2 review is appropriate.

#### **5 Removal of No Construction Screen**

The Joint Responders propose to modify the current rule to allow applications to proceed under Level 1, Level 2, or Level 3 even if upgrades to the EDC's facilities are required. Presently, upgrades cause the application to undergo Level 4 review. The Joint Responders assert that they further modified their proposal in response to the Initial Comments of ComEd, AIC and Staff (Joint Reply, 17-19.)<sup>1</sup> Staff understands that now the Joint Responders propose a process that, even when an interconnection requires significant EDC upgrades, it can proceed under the Level 1, Level 2, or Level 3 process. In such instances the EDC would follow the facilities study review procedures described under the Level 4 review. (Joint Reply, 19.)

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<sup>1</sup> Staff believes that the first full sentence on page 19 of the Joint Responders Reply Comments contains a typo: Second, the proposal removes all the no-construction screen language, both from the introductory sections in 83 Ill. Admin. Code 466.90 and from the actual screens in 466.100 (Level 1) and 466.200110 (Level 2).

AIC points out that the expedited review process depends upon the size and type of DG equipment having no significant impact on the EDC's distribution system, so that little or no investment by the EDC beyond processing paperwork and conducting a Witness Test will be necessary. According to AIC, the Joint Responders proposal will allow expedited review even in situations where the installing the DG equipment requires significant construction on the distribution system. (AIC Initial, 5-6.)

Likewise, ComEd points out that DGs under Level 2 or Level 3 are likely to have a substantial impact on ComEd's distribution system, and ComEd needs the flexibility to perform necessary studies permitted under Level 4 review in order to protect its system reliability for other customers. Processing applications that require Level 4 review under Level 2 or Level 3 could cause ComEd to incur costs not directly paid by applicants. (ComEd Initial, 5.)

Staff is aware of the competing interests here:

- the Joint Responders wish to eliminate time and costs associated with Level 4 review.
- the EDC's wish to follow procedures that ensure the distribution system remains reliable, and that the quality of the electricity delivered to customers is adequate.

Staff does not oppose the proposed modification. The screens in Level 1, Level 2, and Level 3 are intended to "screen out" DG projects that could negatively impact the EDC's distribution system. In a sense, the EDC's review of a project using these screens is an abbreviated form of the feasibility and impact study described under a Level 4 review. If significant construction (beyond minor system modifications) is

necessary, and the project still passes the screens, then it appears to Staff to be reasonable that the EDC and applicant follow the Level 4 facilities study process.

## **6 Supplemental Review**

The Joint Responders propose to add a supplemental review process to the current rule under which, after the results of an EDC's Level 2 review indicate that the DG cannot be connected under the expedited process, the EDC must offer to take another look at the project using three different screens:

1. Minimum Load Screen
2. Voltage and Power Quality Screen
3. Safety and Reliability Screen

Joint Reply, Attachment A, 22-23 (Proposed Part 466.110(g).)

The supplemental review that the Joint Responders propose is an additional study process within the Level 2 expedited review wherein an applicant that fails the technical screens can pay the EDC to take another look using different criteria. .

ComEd is not opposed to the supplemental review concept. However, ComEd is opposed to the Minimum Load Screen that the Joint Responders proposed. ComEd notes that there is ongoing research regarding loading and potential for islanding, and because concerns on the subject are not fully resolved, it is premature to add the proposed screen for 100% of minimum line loading. (ComEd Initial, 12-15.)

In addition to sharing ComEd's concerns with respect to the Minimum Load Screen, AIC points out that the Supplemental Review process is unnecessary because the current rule already provides for a streamlined review and costing process for

applicants whose DG units will require minimal work beyond the service tap. AIC also states that the proposed Supplemental Review process would make purposeless the existing technical standards that utilities apply. (AIC Initial, 6-7.)

Staff is concerned that the Joint Responder's Supplemental Review proposal transforms a straight-forward and logical Level 2 expedited process that uses universally accepted screens into a much more complicated process that relies upon different screens that are not universally accepted.

For example, Staff does not find the Joint Responder's argument in support of using a 100% minimum load screen within its proposed supplemental review to avoid islanding to be convincing, and agrees with ComEd that adopting such a high threshold at this time, appears to be premature. (ComEd Comments, 13-15.) Staff is not convinced that minimum loading on distribution circuits over time is consistent enough for EDC's to use a supplemental review screen that sets a 100% of minimum load threshold. In addition, radial distribution circuits do not utilize the same protection schemes as looped transmission systems under FERC jurisdiction, and Staff is not convinced that all aspects of FERC's SGIP are directly transferrable to distribution systems in Illinois. The fact that some utilities or jurisdictions may have adopted a practice of using 100% minimum load as the level to avoid islanding does not, by itself, make that practice a "best practice" for EDC's in Illinois.

Since the parties do not agree on the screens to be used for the proposed supplemental review, the proposed supplemental review process, at least for now, should be excluded from revisions to Part 466. In practical terms, Staff finds that the exclusion of the supplemental review from the Level 2 review would likely have little

effect on applicants. As AIC points out, Section 466.100(f) of the current rule provides for an additional review of the DG interconnection without requiring a Level 4 review. (AIC Comments, 6.) This existing provision has been working well, and it is not apparent to Staff that any change is needed at this time.

### **III. Conclusion**

WHEREFORE, the Staff of the Illinois Commerce Commission respectfully requests that its recommendations be adopted in their entirety consistent with the arguments set forth herein.

Respectfully submitted,

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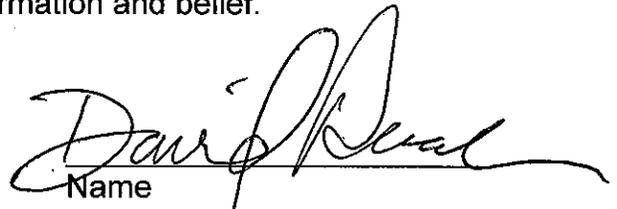
November 6, 2014

Counsel for the Staff of the  
Illinois Commerce Commission

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COUNTY OF SANGAMON        )        SS

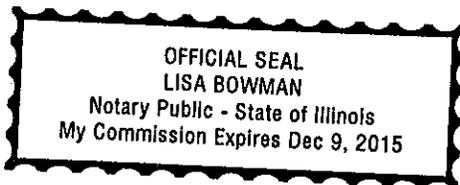
**VERIFICATION**

David Rearden, on oath, states that he is employed by the Illinois Commerce Commission as a Senior Economist in the Policy Program; that he is authorized to make this Verification on behalf of the Staff of the Illinois Commerce Commission; that he has read the foregoing Staff Initial Verified Comments, and is familiar with the contents thereof; and that the matters set forth in the attached Staff Initial Verified Comments are true and correct to the best of his knowledge, information and belief.

  
Name

Subscribed and sworn before me  
This 07<sup>th</sup> day of November, 2014.

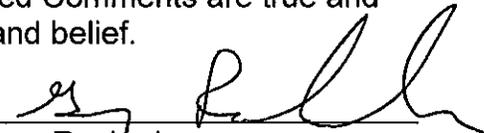
  
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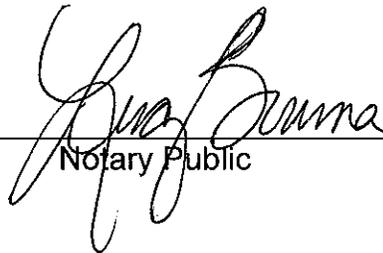
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**VERIFICATION**

Greg Rockrohr, on oath, states that he is employed by the Illinois Commerce Commission as a Senior Electrical Engineer in the Safety and Reliability Division; that he is authorized to make this Verification on behalf of the Staff of the Illinois Commerce Commission; that he has read the foregoing Staff Reply Verified Comments, and is familiar with the contents thereof; and that the matters set forth in the attached Staff Reply Verified Comments are true and correct to the best of his knowledge, information and belief.

  
\_\_\_\_\_  
Greg Rockrohr

Subscribed and sworn before me  
This 6<sup>th</sup> day of November, 2014.

  
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Notary Public

