

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

IN RE:)	
)	DOCKET NO. RMU-2016-0003
REVIEW OF ELECTRIC)	
INTERCONNECTION OF)	COMMENTS ON PROPOSED
DISTRIBUTED GENERATION)	AMENDMENTS
FACILITIES RULES [199 IAC)	
CHAPTER 45])	
)	

The Environmental Law & Policy Center (ELPC), Iowa Environmental Council (IEC), and Interstate Renewable Energy Council, Inc. (IREC), collectively file these comments on proposed amendments to Iowa Administrative Code Chapter 45 as proposed in the Iowa Utilities Board Order Commencing Rulemaking issued on July 22, 2016, and proposed forms and processes as detailed in the Board Order Requesting Comments on Proposed Forms and Processes issued on August 8, 2016.

I. Introduction

This rulemaking represents the culmination of a thorough reexamination of Iowa’s interconnection standards that the Iowa Utilities Board (Board) initiated as part of NOI-2014-0001. The Board’s proposed rulemaking incorporates important best practices that stakeholders put forward on a consensus basis during NOI-2014-0001. Moving forward with the proposed rulemaking will improve Iowa’s interconnection standards, but there are some additional changes that would further strengthen Iowa’s standards and make Iowa’s rules consistent with national best practices.

Iowa has a history of adopting and implementing best practice interconnection rules based upon the FERC Small Generator Interconnection Procedure (SGIP).¹ As was noted in the NOI, the original FERC SGIP rules are now outdated and inefficient for utilities, customers, and developers as the volume of distributed generation systems seeking to connect to the grid increases. In November 2013, FERC substantially revised its SGIP and incorporated many new best practices. The details of the updated SGIP were developed in a comprehensive process involving many of the largest utilities, national labs, government agencies, and technical experts. The revised SGIP includes many innovations to streamline distributed generation (DG) interconnection, including the creation of a pre-application report and changes to the supplemental review process to allow a greater number of systems to proceed without full study, while also maintaining system safety, reliability, and power quality.

In the early part of NOI-2014-0001, several commenters recommended updating Iowa's interconnection rules to be in line with FERC SGIP and other state interconnection best practices. The Board responded to commenters' recommendation by requesting proposals for interconnection rule changes based on the FERC SGIP and the recommendations of stakeholders. The Board received proposed rule changes and a first round of comments on February 16, 2015 and response comments on April 7, 2015. The response comments included joint comments from ELPC, IEC, MidAmerican, and IPL covering several areas of agreement, including on pre-application reports and supplemental review. The Board then issued an order on September 1, 2015 with a draft of potential rule changes and scheduled a workshop on October 6, 2015, followed by additional comments on November 6, 2015 and December 1, 2015. The

¹ See, e.g., In re: Electric Interconnection of Distributed Generation Facilities, Order Adopting Rules, Docket No. RMU-2009-0008 (May 26, 2010).

additional comments included a second round of joint comments from ELPC, IEC, MidAmerican, IPL, and IREC.

The Board's proposed rules reflect significant consensus developed during the course of the NOI and make many important updates to the interconnection rules, while also incorporating several other important updates by rule reference to processes and forms available on the Board website. These proposed changes and references incorporate key aspects of the updated FERC SGIP rules and other best practices and will significantly improve Iowa's interconnection standards.

We support proposed changes to the interconnection rules that:

- increase transparency and minimize administrative burden on utilities and developers by establishing a pre-application report process; 199 IAC 45.4(1)(a) and attachment to IUB Order Requesting Comments on Proposed Forms and Processes (August 8, 2016);
- create a more robust "supplemental review" process that provides applicants that fail one or more of the Level 2 screens the option of avoiding a costly and time-consuming Level 4 study if the project passes three additional screens that evaluate potential system impacts to ensure safe and reliable interconnection; 199 IAC 45.9(6) and attachment to IUB Order Requesting Comments on Proposed Forms and Processes (August 8, 2016);
- clarify the site control language in the general requirements in order to avoid confusion in cases where the applicant is not a customer of the utility at the proposed site; 199 IAC 45.5(6);

- refine the Level 2 size limit for inverter-based systems to utilize a more technically accurate approach that evaluates not only system size but also the voltage of the line at the point of interconnection and the proposed generator's distance from the substation; 199 IAC 45.7(2);
- increase the Level 1 ("Fast Track") eligibility limit to 20 kVA, to better reflect grid capabilities, allowing more small-scale projects to safely come online while enjoying the benefits of a more expedited review process;
- add energy storage to the definition of distributed generation facility in order to clarify that distributed energy storage is subject to interconnection rules; 199 IAC 45.1(1) and
- allow an applicant who fails the review screens to keep the review order position so long as the applicant makes a new interconnection request under the study process within 15 days; 199 IAC 45.8(2)(f).

We have commented extensively on those changes in NOI-2014-0001 and incorporate those comments by reference.

We still think that there are a few areas where the proposed rule changes could be improved to provide greater transparency, certainty, and fairness. We address these areas in more detail below.

II. Substantive Updates to the Interconnection Standards Should Be in the Rules and Not Simply on the Board Website.

The proposed rule changes include several references to information on the Board website and remove the model forms from the rules and place them on the website. Generally, we think the best practice is to include substantive portions of the interconnection standards in the Chapter 45 rules and not only on the board website. The model forms generally reflect the

substance of the Chapter 45 interconnection rules, and we do not object to the model forms being posted on the website. However, there are substantive matters that are not detailed elsewhere in Chapter 45 that should be in the rules and not just the website, including the pre-application report, the supplemental review process, and details about interconnection fees.

ELPC, IEC, IREC, MidAmerican, and IPL filed two rounds of joint comments that addressed proposed language for a pre-application report and a supplemental review process. The consensus among this key group of stakeholders reflects the consensus that has been reached nationally through the FERC SGIP update process and in multiple other states. We are pleased that the Board has selected the language that this stakeholder group recommended for a pre-application report and supplemental review process, but we strongly urge the Board to put these requirements in the rule itself rather than only making reference to it on the Board's website. The pre-application report and supplemental review process are best practices that will make Iowa's interconnection process work more efficiently and effectively, but they must be included in the rule.

Iowa has an administrative rulemaking process that requires agencies to follow specific steps when adopting substantive rules. The rulemaking process ensures that there are safeguards and opportunities for public participation and judicial review. If substantive provisions such as the pre-application report, supplemental review and interconnection fees are not included in the rule, it is possible that future changes to these substantive policies could take place without the protections of the rulemaking process. That creates market and financing risks for businesses that would like to invest and scale up in Iowa. In addition, leaving these important substantive provisions on the website raises many questions that have not been adequately addressed such as "who has the authority to change the website?", "what is the process that will be followed for

changing the website?”, “what is the role of stakeholder participation in making decisions to change the website?”, and “what if any recourse is available if the website is changed to the detriment of stakeholder interests?” The Board should not miss this opportunity to create strong, stable interconnection policies in Iowa and that is accomplished by making substantive changes in rule.

Significant work went into building the consensus on the pre-application report and supplemental review process. While we are always willing to work collaboratively, it is not always easy to come to agreement among stakeholders. In this case, we have consensus among state and regional environmental organizations, a national clean energy organization, and the two major electric investor-owned utilities in the state. We think it is better to reflect the stakeholder efforts in rules and to ensure that future changes have a similar process that reflects stakeholder input. We recognize that distributed generation and interconnection standards continue to evolve, and there will likely be a need for future updates. The rulemaking process allows Iowa to develop and update consensus-based interconnection standards. This process has allowed for all stakeholders to participate and has given them a clear understanding of how to participate. The Board should ensure that future processes to change the pre-application report and supplemental review provisions are likewise inclusive by including those provisions in the Board’s rules.

Further, it is more transparent to utilities, customers and renewable developers to have substantive descriptions of the pre-application report and supplemental review in the rules. Both of these pieces have substance that is not otherwise addressed in the existing rules. The pre-application report and supplemental review documents describe new core parts of the interconnection process and include important details that are not anyplace else in the rules. Items of this substantive nature should be in the rules, and all of the other substantive portions of

the interconnection standards are currently in the rules. There is additional benefit to the core substance of the interconnection standards being all in the rules themselves – there will only be one place where someone looking to understand Iowa’s interconnection process needs to go in order to understand the full process. By including the pre-application report and supplemental review process on the website, and by including interconnection fees amounts only within the model forms on the website, someone hoping to understand Iowa’s interconnection process now has to look at the rules and visit multiple web pages to understand the full process. In fact, someone wanting to know what interconnection fees are required may have no reason to think that information would only be available on the Board’s website within the model forms.

The updating of the interconnection standards has focused on best practices around the country, and other states’ practices are instructive here. No state that has adopted the pre-application report or supplemental review process has included the substantive elements of those procedures on a public utility commission’s website instead of in rules.² Including the substantive portions of the pre-application report and supplemental review process in the Board’s rules would be consistent with the practice in other leading states and should be followed in Iowa as well.

III. Disconnect Device Rules Should Allow Flexibility in Placement of Placards, Appropriate Remedies for Non-Compliance, and Standard Reporting Requirements.

² See, e.g., CPUC D.12-09-018, Attachment A (CA Rule 21 Tariff), § E.1 (pre-application report); MADPU Docket No. DPU 11-75, Order 11-75-E, Appendix A (MA Interconnection Standards), § 3.2 (pre-application report); Ohio Admin. Code § 4901:1-22-04(B)(2) (pre-application report); *In the Matter of Petition for Approval of Revisions to Generator Interconnection Standards*, N.C. Utils. Comm’n (“NCUC”), Docket No. E-100, Sub 101, Order Approving Revised Interconnection Standard at 6-10 (pre-application report); South Carolina Public Util. Comm’n (“SCPUC”) Docket No. 2015-362-E, Order No. 2016-191 (April 26, 2016) (pre-application report); Ohio Admin. Code 4901:1-22-07(E); CA Rule 21 Tariff § G.2; MA Interconnection Standards Fig. 1, n.8 (as modified by MADPU Order 11-75-F at 12-14) (supplemental review).

We support the Board's proposed definition for "disconnection device" in rule 15.1. The definition is consistent with Iowa Code § 476.58(1)(a) and appropriately includes specific types of disconnection devices that can be used by interconnection customers.

We generally support the Board's approach to "adjacent to the meter" for the placement of the disconnection device. In our comments in the NOI, we recommended some flexibility for unique and difficult or expensive situations.³ In those limited circumstances, we recommended that the rules require a permanent placard on the meter that indicates the location of the disconnection device if it is outside of the prescribed distances. MidAmerican has supported this flexibility in its comments in the NOI as well.

The Board may have tried to address this point in 45.3(2)(b) by providing that "[i]f the distributed generation facility is not installed at the building with the electric meter, an additional placard must be placed at the electric meter to provide specific information regarding the distributed generation facility and the disconnection device." This language addresses the flexibility around the placard, but the proposed language for section 45.3(2)(a) does not accomplish the same flexibility. We recommend similar language be included in part (a) such as:

In limited circumstances where the distributed generation facility is not installed at the building with the electric meter and the applicant can demonstrate significant expense or difficulty in locating the disconnection device adjacent to the meter, the disconnection device may be located adjacent to the distributed generation facility and an additional placard must be placed at the electric meter to provide specific information regarding the distributed generation facility and the disconnection device.

Further, we recommend that any remedy for failure to comply with disconnect device requirements be related to the purpose of the interconnection rules – to safely interconnect distributed generation systems. While the first step to remedy the situation should be to provide

³ *In re: Distributed Generation*, NOI-2014-0001, ELPC IEC IREC Reply to November 6, 2015 Comments, 8 (filed Dec. 1, 2015)

written notice to the customer and installer and to provide a reasonable time to correct the deficiency, we think denying interconnection service if the customer fails to comply in a reasonable timeframe is appropriate. MidAmerican has supported this approach in its comments in the NOI. We do not think denying electric service altogether is the appropriate way to address this issue, and such an approach could create challenges in enforcement and unnecessary conflict.

Iowa law has a strong policy preference for limiting the situations in which customer service is disconnected. *See* Iowa Code § 476.20 (“Disconnection limited”). While HF 548 allows the Board to draft rules that include “[p]rocedures for electric utilities to deny or disconnect service for safety reasons to a person who does not comply with rules adopted pursuant to this subsection,” it is not clear whether this language refers to “interconnection service” or “electric service.” This statutory language must be read in the context of Iowa’s policy preference to limit disconnection of service and in the context of the bill’s focus on safely interconnecting distributed generation systems. It is a logical interpretation that non-compliance with the interconnection disconnect device rules would be a safety reason to deny only interconnection service. When combined with the policy preference to limit disconnection of electric service, this interpretation that only interconnection service should be denied is even stronger. In fact, the Board takes this approach in other parts of the proposed rules. In section 45.3(4), the proposed rules add the following language: “If the utility discovers the applicant’s facility is not in compliance with the requirements of IEEE Standard 1547, and the noncompliance adversely affects the safety or reliability of the electrical system, the utility may require disconnection of the applicant’s facility until it complies with this chapter.”

No party to NOI-2014-0001 has offered an explanation for how denying electric service altogether would increase safety when safety concerns can be satisfied by simply denying the interconnection or disconnecting the distributed generation system. The remedy for non-compliance should be consistent with the statutory requirement that the remedy be for safety reasons and consistent with the preference in Board rules to limit service disconnects. Disconnection of electric service goes beyond safety and could be seen as unnecessarily punitive. We recommend the Board revise 45.3(2)(f) to limit disconnection to the distributed generation facility only.

The proposed rule amendment 45.3(6) also provides that owners of distributed generation must provide information to local paid or volunteer fire departments. The proposed rule change states, in part, that the owner “is required to provide any information related to the distributed generation facility as required by that local fire department, including but not limited to” the listed information in 45.3(6)(a)-(c) (site map, information on access to the disconnection device, and statement verifying installation in accordance with the National Electric Code). This proposed amendment goes beyond the statutory requirement for these rules and may lead to a patchwork of notice requirements, which will unnecessarily complicate solar installations and increase costs.

Iowa Code § 476.58(2)(b) states that the Board’s rules must include “[a] requirement that interconnection customers notify local paid or volunteer fire departments of the location of distributed generation facilities and associated disconnection devices for distributed generation facilities on the property.” The statute clearly identifies the information required in the notification – the location of the distributed generation facility and the disconnection device – and does not provide for fire departments to add additional notification requirements. We believe

the statutory notification requirement can be met with a site map and limited supplemental information to ensure the distributed generation facility and disconnection device are clearly identified. We encourage the Board to use this rulemaking process to standardize the requirements for the information in the notification provided to local fire departments and to remove the language allowing fire departments to require additional information beyond that standardized list.

IV. Interconnection Fees Should Be in the Rules.

During the NOI, we advocated a set of principles for interconnection fees. We believe that interconnection fees should allow the utility to recover its reasonable costs, assuming the utility is acting efficiently to keep costs down. We stated that it is important that the interconnection fees continue to provide the utilities with an incentive to improve the quality and efficiency of their interconnection process.

To that end, we recommended interconnection fees for Level 1 interconnections be raised to \$100, while acknowledging that there may be additional room to increase fees to cover reasonable costs. Given Iowa's strong policy preference to encourage alternative energy sources, we thought it better to err on the side of interconnection fees being below cost and utilities having a strong incentive to improve efficiency and service than to set interconnection fees too high and remove the incentive for continuous improvement and better service while unnecessarily adding to the cost of distributed renewable systems. While the Board did not adopt this approach, we do not object to the fee levels set by the Board in the forms to be posted on the website.

However, we have concerns with the Board's proposed approach to remove the interconnection fees from the rules altogether. The only place that that interconnection fees

previously appeared in the rules was in the interconnection forms, which the Board proposes to remove from the rules. Interconnection fees are a substantive part of the interconnection standards and can have a major impact on distributed generation projects. While we recognize the need to adjust interconnection fees to reflect costs, there should be a robust process to examine those costs and to hear from stakeholders before making changes. Removing the interconnection fees from the rules may result in frequent and unpredictable future changes to fees absent a public stakeholder process for considering such changes and without providing any evidentiary basis. This can work against all stakeholders. Developers and customers worry about fees rising unnecessarily, and the utilities worry that a different Board could have a different approach to the interconnection fees and could eliminate the fee altogether as a policy matter. These types of decisions should be subject to the kind of review that accompanies a rulemaking. In addition, as noted above, it is more transparent to all stakeholders to have the interconnection fees in rules rather than buried in forms on the Iowa Utilities Board website. Finally, we are not aware of any other state that only sets interconnection fees on the public utility commission website instead of in its rules. We recommend that the Board add the current interconnection fees to the rules rather than have them only available on the model forms on the website.

V. Reports Should Be Transparent and Include Sufficient Information.

As a general matter, we support transparent reporting by the utilities with sufficient detail to allow stakeholders to independently review and understand the program details about which the utilities are reporting. We support including as much information as possible that is not redacted for the purposes of confidentiality and limiting use of confidential filings whenever possible. We also support the Board's actions to promote transparency and stakeholder engagement, and we see reporting as an opportunity to advance those interests.

The proposed rule change in 45.13(2) includes a reference to the Chapter 15 distributed generation interconnection reporting requirements. We support including all required reporting information in the rules for better transparency, consistency, and clarity. In our recent comments in Docket No. RMU-2016-0006, we included the additional detail (for rule 15.12) that should be included in Chapter 15 if it is not included in Chapter 45. Alternatively, the Board could include that list, reproduced below, in rule 45.13(2):

The information to be reported shall include:

- a. The date when the application was received;
- b. The total nameplate capacity and fuel type of the distributed generation facility;
- c. The level of review received (Level 1, Level 2, Level 3, or Level 4), and whether the project failed any initial review screens and if so which screens, whether the project received supplemental review, and whether any impact study and/or facility study was conducted; and
- d. Whether the interconnection was approved, denied or withdrawn and the date of such action.
- e. Whether the distributed generation facility was constructed and began operation and, if so, the date the facility began operation.

Each utility shall include a summary as part of the report that provides aggregate information on the pre-application reports and interconnections requests and distributed generation that has been interconnected in the utility's service territory including distributed generation capacity added in the previous calendar year by fuel type and total distributed generation capacity operating in the utility's service territory by fuel type.

The additional detail we propose will significantly improve transparency of the interconnection process and the understanding of distributed generation in Iowa. These changes will provide consistent information across the utilities about the interconnection process, the time it takes to process applications, screens that are failed, and the amount of distributed generation capacity. This additional information would not require significant additional effort from the utilities. Interstate Power and Light Company (IPL) has provided the reporting information in table format, and the additional information would only require a few additional columns. *See,*

e.g., IPL, Filing of Interconnection Request Annual Report (filed May 01, 2014)⁴. IPL has also previously provided much of the summary information that we suggest in past reports. The transparency and consistency of the additional information would help us understand if the interconnection rules are working effectively, would help inform the need for future policy changes, and would be consistent with and a natural addition to the Board's information gathering.

VI. Iowa Should Replace the “No Construction Screen” With a More Efficient Process.

The proposed rules have not removed the “No Construction Screen” from Levels 1 through 3 Review, for which we have advocated in prior comments. Across the country, states are eliminating the No Construction Screen in favor of a more efficient process that determines the nature and costs of necessary upgrades without forcing projects unnecessarily into Level 4 study.⁵ For example, North Carolina⁶ and South Carolina⁷ have adopted this approach, and Minnesota⁸ is currently considering it. Illinois⁹ also removed the No Construction Screen from its recently revised interconnection standards. Further, this approach is consistent with the treatment of interconnection requests that pass the FERC SGIP Supplemental Review Process.¹⁰

⁴ Available at <https://efs.iowa.gov/cs/groups/external/documents/docket/mdaw/mji3/~edisp/227276.pdf>.

⁵ See, *e.g.*, CA Rule 21 Tariff § F.2.a; Hawaiian Electric Company (HECO) Rule 14H, Appx. III (Interconnection Process Overview), § 1.c; IREC *Model Interconnection Procedures* §§ III.A.5, B.5, D.2.

⁶ North Carolina Docket E-100, SUB 101, Order Approving Revised Interconnection Standard (May 15, 2015).

⁷ South Carolina Docket No. 2015-362-E, Order No. 2016-191, Order Adopting Interconnection Standard and Supplemental Provisions (April 26, 2016).

⁸ Minnesota Public Utilities Commission Docket No. E999/CI-16-251, Notice of Comment Period (June 21, 2016).

⁹ Illinois Commerce Commission Docket No. 14-0135, Second Notice Order at 2 (July 20, 2016).

¹⁰ FERC SGIP § 2.4.5.

As it stands, the No Construction Screens in Levels 1, 2, and 3 do not allow a project to receive expedited review if the project would require construction of any facilities by the utility to accommodate the project. This means that even if the project passes all other technical screens, it nonetheless may be required to undergo and pay for full Level 4 study, even though the other screens indicated there would be no safety or reliability concerns. This is very inefficient.

Indeed, there are many situations in which a project may require some level of construction, but where there is no need to study the entire system prior to approving the upgrade. For example, construction of a standard interconnection service for a newly located facility may cost a few thousand dollars, but does not require a full-system impact study because it does not change conditions upstream of the facility. Or, replacement of a transformer that has reached the end of its useful life costs upwards of \$10,000—thus requiring full study for failing the “No Construction Screen”—but it makes no change to the system that would warrant full study. Requiring full study in situations like these is wasteful.

We again urge the Board to increase efficiency by removing the No Construction Screen and instead allow utilities additional time to provide a cost estimate along with an Interconnection Agreement when a utility determines upgrades are necessary. For generators requiring no construction, the utility would provide the Interconnection Agreement within five business days, and for generators needing only minor modifications, the utility would have fifteen business days. For projects requiring more substantial modifications, the utility would have twenty business days to develop the cost estimate and schedule for the upgrades and provide the Interconnection Agreement; or, the utility could opt to conduct an interconnection study for the project. These extra days give the utilities some extra time to develop a cost

estimate but still save substantial amounts of time and resources (for the utilities as well as the developers and customers) as compared with a full study process.

Even if the Board does not eliminate the No Construction Screen, it should revise the rules to make clear that utilities have the discretion to allow a project to receive expedited review even if it does not pass the No Construction Screen. The rules currently provide that, for projects undergoing Level 2 review, when “the utility determines that the distributed generation facility can be interconnected safely and will not cause adverse system impacts, even if it fails one or more of the Level 2 screening criteria,” it shall provide the applicant with an interconnection agreement. Rule 45.9(3). It is not clear why the rules do not allow the utilities to exercise such discretion for projects undergoing Level 1 or Level 3 review. FERC SGIP likewise allows utilities this sort of discretion. SGIP provides:

If the proposed interconnection fails the screens, but the Transmission Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Transmission Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business days after the determination.¹¹

If the Board chooses not eliminate the No Construction Screen, we recommend that, at a minimum, the Board expand Rule 45.9(3) to apply to Level 1 and Level 3, or that the Board adopt language similar to FERC SGIP section 2.2.3, which allows utilities to interconnect a project that fails screens if it will nonetheless have no adverse effect on the system. This will give the utilities and applicants necessary flexibility while avoiding costly and time-consuming full study where it is not otherwise warranted.

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Respectfully submitted,

¹¹ FERC SGIP § 2.2.3.

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