
IOWA UTILITIES BOARD
Policy Development Section

Docket No.: NOI-2014-0001
Memo Date: March 9, 2014

TO: The Board

FROM: Brenda Biddle
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SUBJECT: Recommendation Regarding Interconnection of Distributed Generation

I. Background

On January 7, 2014, the Iowa Utilities Board (Board) issued an order commencing an inquiry into distributed generation (DG), inviting interested parties to comment on broad general questions related to the benefits and challenges of DG, both for utilities and their ratepayers, on policies that should be examined with respect to DG, and to identify the technical, financial, regulatory, and safety aspects of DG that should be addressed in this inquiry docket. Parties were also invited to comment on other issues they considered relevant to any discussion regarding DG, such as whether there were any technical hurdles to implementing DG. The Board also welcomed any policy recommendations for the Board, other state agencies, or the General Assembly to consider. Initial comments were received from over 170 interested parties, including utilities, utility associations, environmental groups, renewable energy advocates, energy-related organizations, businesses, and individuals.

Because of the breadth of topics identified by the parties in the initial comments, the Board, in its May 12, 2014, order, suggested the inquiry focus on the topics of net metering;¹ interconnection of DG (including safety and reliability); and customer awareness/protection. The Board requested the parties respond to specific questions outlined in the order with responses due June 24, 2014. There were 47 parties that filed comments.

Staff reviewed the responses to the May 12, 2014, order and drafted additional questions intended to get the parties' comments and additional information on specific issues related to net metering and interconnection. Additionally, staff drafted a DG checklist for the parties to review. The Board issued an order on September 19, 2014, which requested that the parties respond to additional

¹ Avoided cost issues are the subject of a separate investigatory docket, Docket No. INU-2014-0001.

questions and reply to each other's comments. Responses and reply comments were due October 24, 2014.

On December 22, 2014, the Board issued an order soliciting proposed changes to the Board's Chapter 45 interconnection rules (199 IAC 45) and requested that the utilities provide actual cost and supporting data to justify revising interconnection fees. Additionally, the Board requested that MidAmerican Energy Company (MidAmerican) propose specific language to revise the notification requirement in Iowa Code § 476.6A that may be used for future legislative action. Responses and comments were due February 16, 2015.

Comments were filed by MidAmerican, Interstate Power and Light Company (IPL), and the Alliance for Solar Choice (TASC). The Environmental Law & Policy Center, the Iowa Environmental Council, and the Interstate Renewable Energy Council, Inc. (ELPC et al.) collectively filed joint comments.

II. Legal Standards

A summary of the interconnection statutes and Board rules is provided below.

Qualified Facilities (QF) and Alternate Energy Production (AEP) Interconnection Policy

The Energy Policy Act of 2005 required state commissions to consider implementing the Public Utility Regulatory Policies Act Interconnection Standard (PURPA Standard), which required utilities to interconnect any customer's on-site generation (i.e., DG) with the utility's local distribution system, based on Institute of Electrical and Electronics Engineers (IEEE) Standard 1547 and establish non-discriminatory practices and procedures that promote the best practices of interconnection of DG. In an order issued April 25, 2007 (Docket No. NOI-06-4), the Board noted that the PURPA Standard had three parts. The first part required the Board to consider broadening its interconnection requirements to include all forms of customer-owned on-site generation, not just QFs or AEP facilities. The Board declined to adopt this part of the PURPA Standard but continued examining it as part of its ongoing inquiry. The second part of the PURPA Standard required the Board to consider adoption of IEEE Standard 1547. The Board noted that it had considered and adopted this standard in a prior rule making (Docket No. RMU-04-6). The third part of the PURPA Standard required the Board to consider revising its interconnection rules to reflect current best practices for interconnection agreements and procedures. The Board declined to adopt this part of the PURPA Standard but continued examining it as part of its ongoing inquiry.

As a result of its inquiry, the Board initiated a proposed rule making (Docket No. RMU-2009-0008) to further consider the PURPA Standard. On May 26, 2010, the Board adopted final interconnection rules for QFs and AEP facilities rather

than all forms of on-site generation. The Board clarified that the technical standards of interconnection would be based on IEEE Standard 1547 (i.e., involving revisions to rule 199 Iowa Administrative Code (IAC) 15.10 applicable to all utilities, and an identical parallel new rule 199 IAC 45.3 applicable to rate-regulated utilities only), and that the rules incorporating current best practices for interconnection agreements and procedures (199 IAC 45) would apply to rate-regulated utilities only.

The Board's Chapter 45 interconnection rules (199 IAC 45) are designed to offer standardized and streamlined requirements, forms, and procedures for smaller facilities, and to make the interconnection process more transparent and less complex for larger facilities. The rules provide four levels of review:

Level 1 Expedited Review - For smaller lab-certified inverter-based facilities with a nameplate capacity of 10 kW or less, which require no upgrades of the utility's distribution system. This level involves limited insurance requirements, limited application fees (\$50), and streamlined standard application forms and contracts.

Level 2 Expedited Review - For larger lab-certified facilities with a nameplate capacity of 2 MW or less, which require no upgrades of the utility's distribution system. This level involves limited insurance requirements (for facilities 1 MW or less), higher application fees (\$100 + \$1 per kW), and standard application forms and contracts.

Level 3 Expedited Review - For non-exporting lab-certified facilities, which require no upgrades of the utility's distribution system. This level involves higher application fees (\$500 + \$2 per kW), and standard application forms and contracts.

Level 4 Review - For all other interconnections. This level involves higher application fees (\$1,000 + \$2 per kW), standard application forms and contracts, and prescribed studies for determining any potential adverse system impacts and remedies (i.e., Feasibility Studies, System Impact Studies, and Facilities Studies). QFs and AEP facilities are required to pay all study costs and the costs of any required upgrades to the utility's distribution system.

Rule 45.13 requires rate-regulated utilities to file annual reports providing information about each of the utilities' completed interconnection requests, including the final outcome.

III. Analysis

IPL and ELPC et al. provided redline versions of Chapter 45 which included proposed changes to the rules. MidAmerican mentioned in its comments that it had reviewed IPL's proposed changes and concurred with those additions but also provided some additional language for the Chapter 45 rules. Similarly, TASC had reviewed the revisions suggested by ELPC et al. and said that the revisions represent meaningful improvements to Iowa's current interconnection procedures.

Staff believes the comments filed provide a starting point for revisions to the Board's Chapter 45 rules. However, staff suggests that the Board allow the parties the opportunity to provide reply comments. Reply comments will help staff draft proposed rule changes that have been more fully vetted and should help expedite the rule-making process.

Additionally, staff suggests the Board also ask parties to provide reply comments on the cost data provided to justify revising DG interconnection fees and the language MidAmerican proposed to revise the notification requirement in Iowa Code § 476.6A.

IV. Recommendation

Staff recommends that the Board issue the attached draft order requesting the parties file reply comments on the proposed changes to the Board's Chapter 45 rules and the additional information provided.