

IOWA UTILITIES BOARD
Policy Development Section

Docket No.: NOI-2014-0001
Memo Date: December 19, 2014

TO: The Board

FROM: Brenda Biddle
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SUBJECT: Scheduling Conference Call to Discuss Distributed Generation Data

I. Background

On January 7, 2014, the Iowa Utilities Board (Board) issued an order commencing an inquiry into distributed generation (DG), inviting interested individuals or groups 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. The Board also requested comments on other issues considered relevant to the discussion of DG, such as whether there were any technical hurdles to implementing DG and identification of any policy recommendations for the Board, other state agencies, or the General Assembly to consider. Initial comments were received from over 170 interested individuals and groups, including utilities, utility associations, environmental groups, renewable energy advocates, energy-related organizations and businesses.

Because of the breadth of topics identified by participants 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 also asked that the utilities file detailed information related to each DG facility connected to the utility's system. 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 participants' opinions and additional information on specific issues related to net metering and interconnection. Additionally, staff

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

asked several questions regarding the data on distributed generation provided by the utilities and suggested the Board schedule a conference call to discuss and clarify the DG data. The Board issued an order on September 19, 2014, which requested additional information related to the DG data and stated that the Board would issue a subsequent order setting a date and time for a conference call with utilities, utility organizations, and other interested participants to discuss and clarify the DG data.

II. Analysis

In the May 12, 2014, order, the Board requested that all utility participants provide detailed information related to each DG facility connected to the utilities' systems consisting of: nameplate capacity; date interconnected; fuel type; classifications (i.e., qualified facility (QF), alternate energy production (AEP), net metering, and any others that may apply); indication of which AEP facilities contribute to the utilities' AEP purchase obligation; whether each facility is subject to a tariffed or contracted rate; the applicable retail tariff customer class; and whether hourly load data are available for each facility. The Iowa Association of Municipal Utilities (IAMU), the Iowa Association of Electric Cooperatives (IAEC), Interstate Power and Light Company (IPL), and MidAmerican Energy Company (MidAmerican) filed data in response to the Board's request.

After reviewing the initial data filed, staff found that the data was not necessarily consistent among utilities and had some additional questions. The Board's September 19, 2014, order asked additional questions, three of which were specifically related to the DG data. Responses to those questions were filed by the IAMU, the IAEC, IPL, and MidAmerican. The responses are summarized below:

Question 38. For each reported DG facility, indicate whether capacity and generation data is reported to the Energy Information Administration (EIA). In other words, do any DG facilities file either EIA² 860 or EIA 923 reports? If so, identify those facilities.

The IAMU noted that the instructions for the EIA-860 report require that existing plants respond if the plant's total generator nameplate capacity is 1 megawatt (MW) or greater and the plant's generator(s), or the facility in which the generator(s) resides, are connected to the local or regional electric power grid and have the ability to draw power from or deliver power to the grid.

The instructions for the EIA-923 report state that it is mandatory for all electric power plants and combined heat and power (CHP) plants to report if the total generator nameplate capacity (sum for generators at a single site) is 1 MW or

² Energy Information Administration

greater; and where the generator(s), or the facility in which the generator(s) resides, is connected to the local or regional electric power grid and has the ability to draw power from the grid or deliver power to the grid.

The IAMU noted that six of the DG facilities listed in the table of DG systems interconnected with municipal utilities meet the qualifications for mandatory reporting specified for the EIA-860 and EIA-923 reports. The IAEC said that the DG facilities it reported that are greater than 1 MW in size are also listed on the EIA reports.

IPL revised the DG data to include two columns labeled “Q-38 EIA-860” and “Q-38 EIA-923” and indicated whether each facility reported in the most recent data releases for these survey forms. Thirty-one facilities included in IPL’s data report information via the EIA-860 and/or EIA-923. MidAmerican noted that this question was applicable to owners of DG facilities so MidAmerican had no comment.

Question 39. Did you include all CHP installations in the data you provided? If not, provide comparable data for all CHP installations in your service territories.

The IAEC did not include any CHP facilities in its data submitted in this Docket, as it does not believe any CHP facilities are currently exporting energy to the IAEC members. However, the IAEC is aware of one 9 MW CHP facility in an electric cooperative’s territory that is located at an ethanol plant, with all output being used internally at the plant. The IAMU reported all the relevant data in the initial DG data it filed.

IPL included known CHP installations operating in parallel with IPL’s distribution system in the data reported. However, IPL added eight CHP installations after cross-referencing its data with the EIA-860 and EIA-923 data releases. MidAmerican included all CHP installations in the data it provided.

Question 40. Based on the data provided, it appears that hourly load data is available for the DG capacity associated with all residential customers for both IPL and MidAmerican; for 10 percent of the non-residential DG capacity for MidAmerican; and for 59 percent of IPL's non-residential DG capacity. Is this statement accurate? If no, what are the correct percentages? If yes, discuss what would be required in order to get hourly data for the remaining DG capacity.

IPL reported that residential hourly load data (Alternative Energy and Small Hydro Production (AEP) and Cogeneration and Small Power Production (CSPP)) is available for 100 percent of all DG installations at the bi-directional meter but does not have hourly production data available at the DG installation.

Non-residential is available for 90 percent (adjusted for additions of CHP facilities):

- Non-residential Hourly Load Data (AEP and CSPP) – available for 100 percent of all DG installations at the bi-directional meter; IPL does not have hourly production data available at the DG installation.
- Non-residential Hourly Load Data (Purchased Power Agreements (PPA) – less than 100%) – available for 100 percent of all DG installations at the bi-directional meter; IPL does not have hourly production data available at the DG installation.
- Non-residential Hourly Load Data (PPA-100%) – available for 100 percent of DG installations at the meter.
- Non-residential Hourly Load Data (offset only/interruptible/standby) – available for 78 percent of these DG installations by obtaining hourly data from the EIA- 923 report.
- Non-residential Hourly Load Data (offset only/interruptible/standby) – not available for 22 percent of these DG installations; to obtain hourly data for these remaining DG installations, IPL would need the customer's permission.

MidAmerican said that the statement in this question is accurate and noted that it has hourly data for all residential and non-residential installations that produce energy that potentially goes back to MidAmerican. MidAmerican does not have hourly load data for DG installations which are for the exclusive use of the customer and are not involved in producing energy that goes back to MidAmerican. Data for these installations may or may not exist and MidAmerican believes it would need the customer's permission to acquire this data.

Staff Comments

Staff has reviewed the DG data³ and responses filed by the utilities and observed reporting differences and inconsistencies that should be addressed. The data will be most useful if all utilities are reporting the same information under the same framework.

In the May 12, 2014, order, the Board stated that for purposes of this inquiry, DG would be defined as:

Generation fueled by renewable or fossil-fuel sources that is built in order to serve load located at or near the generator and capable of delivering power to a utility's distribution system.

³ This includes: IPL's Attachment F filed on October 24, 2014, which updated Attachment C_Corrected filed on July 3, 2014; MidAmerican's Attachment No. 1 filed June 24, 2014; the IAEC data filed June 24, 2014, and the IAMU's Appendix A filed on June 24, 2014.

It is unclear from the data filed whether utilities included both distributed generation facilities and those owned by independent power producers. Additionally, staff noticed that the data contains numerous different classification labels and believes it would be helpful for participants who filed the data to provide definitions for each of the classifications used.

Once the data are consistent, it can be combined to provide a meaningful data set for the state of Iowa. It could then serve many purposes such as providing a baseline for the total amount of DG in Iowa. In conjunction with the EIA-860 Iowa-related data, the data set will also provide a further-refined indication of the available generation capacity in the state of Iowa.

Staff suggests that a conference call would be useful to clarify the data and allow the utilities and utility-related organizations (IAEC and IAMU) an opportunity to explain the limitations of the data and discuss how to best interpret the data. Staff recommends that the Board schedule a conference call to begin at 10 a.m. on Tuesday, January 27, 2015. Participants should be directed to use the following telephone number and conference code:

Toll Free Dial-In Number (US & Canada) 1-866-685-1580
Conference Code: 5152817051

The conference call will be led by Board staff with the goal of ensuring that the data filed is consistent among utilities and that all data needed to establish a baseline for the total amount of distributed generation in Iowa is being collected. Utility and utility-related organization participants should be asked to provide definitions for the various classifications used (i.e. offset and sale to the utility, offset only, non-export, no sale to utility, grid only, tariffed rate on both transactions, contract, etc.) prior to the conference call and be prepared to answer questions related to the data.

III. Recommendation

Staff recommends that the Board issue the attached draft order directing the utilities and utility-related organizations to file definitions for the classifications used in the DG data and scheduling a conference call to discuss the DG data.

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