KEYES, FOX & WIEDMAN LLP

FILED WITH
Executive Secretary

November 06, 2015

IOWA UTILITIES BOARD

NOI-2014-0001

***Via Electronic Filing***

November 6, 2015

Executive Secretary
Iowa Utilities Board
1375 East Court Avenue, Room 69
Des Moines, Iowa 50319-0069

**RE: Distributed Generation**
**Docket No. NOI-2014-0001 – The Alliance for Solar Choice's Additional Comments**

Dear Executive Secretary:

Enclosed please find for filing in the above-captioned proceeding the *Additional Comments of The Alliance for Solar Choice*, as filed today on EFS.

Sincerely,

/s/ Blake Elder

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Enclosure

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Executive Secretary
November 06, 2015
IOWA UTILITIES BOARD
NOI-2014-0001

**STATE OF IOWA**
**DEPARTMENT OF COMMERCE**
**UTILITIES BOARD**

| IN RE: DISTRIBUTED GENERATION | Docket No. NOI-2014-0001 |
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## ADDITIONAL COMMENTS OF THE ALLIANCE FOR SOLAR CHOICE

The Alliance for Solar Choice ("TASC") appreciates the opportunity to submit additional comments pursuant to the Iowa Utilities Board's (the "Board") October 9, 2015 Order Soliciting Additional Comments ("Order") in the above-captioned docket. The Order requested additional comments on the proposed changes to 199 IAC 15 and 45, and invited participants to respond on or before November 6, 2015.

TASC advocates for establishing and maintaining successful distributed solar-energy policies throughout the United States. TASC's members represent the majority of the nation's rooftop solar market. They include Demeter Power, Geostellar, Inc., Silveo, SolarCity, Solar Universe, Sunrun, Verengo, and ZEP Solar. These companies are important stakeholders with regard to solar policy at both the state and national levels, and they are responsible for tens of thousands of residential, school, government and commercial solar installations across the United States. TASC has previously submitted comments to the Board in this proceeding on February 25, 2014; June 24, 2014; October 24, 2014; December 22, 2014; February 16, 2015; April 7, 2015; June 15, 2015; and July 15, 2015.

In particular, the Order invited comments on specific subjects discussed at the workshop conducted by Board staff on October 6, 2015. TASC lists and addresses these subjects individually below.

**1. Clarification of what "adjacent to the meter" means and what constitutes a permanent placard**

The Board asks for commenting on a novel issue of first impression in TASC's experience working to develop interconnection standards nationally. To our knowledge, no state or federal interconnection standards have explicitly addressed these two issues. First, the Federal Energy Regulatory Commission's ("FERC") Small Generator Interconnection Procedures ("SGIP") and the Interstate Renewable Energy Council, Inc.'s ("IREC") Model Interconnection Procedures do not directly address these two issues, either. California, which has established interconnection procedures known as "Rule 21," has perhaps the most extensive discussion on placarding. Rule 21 states that an external disconnect switch, if required, shall be installed "near the point of interconnection,"[1] and further states that if the switch is not adjacent to the point of common coupling, then "permanent signage" must be installed at a utility-approved location providing a clear description of the location of the switch.[2] Rule 21 does not appear to directly address either issue for which the Board is seeking clarification.

Some California utilities have established reasonable additional guidance for the location of an external disconnect switch, if required, and related signage. For

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[1] Electric Rule No. 21, Generating Facility Interconnection. Available at http://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_21.pdf. At sheet 148.
[2] *Ibid.,* 149.

example, Pacific Gas and Electric Company's ("PG&E") procedures state that the switch shall be "located 10 feet or less from PG&E's electric meter at the point of common coupling or interconnection and is seen easily from the meter panel."[3] PG&E's procedures further state: "If the device is not adjacent to the PG&E's electric revenue meter(s), a clear map and signs indicating of the location of the disconnect switch are required. If the disconnect switch is not accessible outside the locked premises, include signs with contact information and a distribution provider-approved locking device for the premises."[4]

TASC believes that PG&E's procedures, which are more specific than California's rules, are reasonable and could be used as guidance in Iowa if the Board determines that more-specific procedures are necessary to further encourage DG deployment.

**2. Whether disconnection should be a remedy for failure to place a placard (with or without notice)**

TASC does not believe that automatic disconnection of a customer's DG system is an appropriate remedy for a customer's failure to provide a permanent placard. Rather, a DG customer that has not complied with this requirement should be issued a written warning from the utility, and should have an opportunity to correct the problem within 30 calendar days of receipt of the warning. After the DG customer has corrected the problem, the customer should call the utility – using a

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[3] "Disconnect Switch Requirements for Distributed Generation Customers." Issued by PG&E, July 31, 2015. Available at http://www.pge.com/includes/docs/pdfs/shared/customerservice/nonpgeutility/electrictransmission/handbook/060559.pdf. At p. 2.

[4] *Ibid.*

direct phone number provided by the utility[5] in the written warning sent to the customer – to confirm that the problem has been resolved. The utility should issue a confirmation number to DG customers who report that the problem has been resolved. If a DG customer fails to comply after a written warning from the utility, then the utility should be authorized to disconnect the DG system and must notify the DG customer in writing immediately after it has done so.

### 3. Whether the definition of energy storage should be included in the definition of distributed generation and, if so, what are the parameters of the definition

TASC believes that it is both appropriate and beneficial to explicitly include energy storage in the definition of "distributed generation facility" in Iowa's rules at this time. In addition, TASC believes that DG resources behind a single inverter should be counted or studied at the lesser of the combined power capacity of the DG resources (e.g., solar capacity plus storage capacity) or of the inverter capacity rating. This approach is appropriate because a combined solar-energy system and energy-storage system, when operating behind a single inverter, will never export to the grid above the inverter's capacity.

The many benefits of energy storage, which include reducing peak demand, are becoming well recognized nationally, and consumer interest in energy storage has mushroomed. Numerous U.S. states, including Texas, Oregon, Washington, California, Hawaii, New York, New Jersey and Massachusetts, either have already acted to facilitate the deployment of distributed storage, or are seriously

[5] This phone number could be the same number of the designated employee or office designated by the utility to address pre-applications requests under Iowa's proposed revised rules.

deliberating how to do so. According to recent data from GTM Research, 40.7 MW of energy storage was deployed in the United States in Q2 2015 – a nine-fold increase from Q2 2014, and a six-fold increase from Q1 2015[6]. At the end of Q2 2015, behind-the-meter storage installations were 11 times higher than the figure from the same period last year.[7] GTM projects expects significant growth in the U.S. storage market over the next five years across all sectors, resulting in an 858-MW annual market in 2019 – 13 times the size of the 2014 market, and four times the size of the 2015 market.[8] Growth in this emerging segment of distributed energy resources will be stymied due to lack of clear interconnection standards if the Board does not incorporate storage into Iowa's interconnection rules.

Joint comments submitted by Environmental Law & Policy Center ("ELPC"), Iowa Environmental Council ("IEC") and IREC explained that adding energy storage to the definition of "distributed generation facility" would clarify that energy-storage facilities that will later inject electricity into the distribution system are subject to interconnection rules.[9] The three parties explained that FERC's updated SGIP incorporated a revision to the definition of "small generating facility" by explicitly adding "storage for later injection," noting: "While FERC believed that the original definition of small generating facility was broad enough to include storage

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[6] "U.S. Energy Storage Monitor Q2 2015: Executive Summary." Published by GTM Research, September 2015. Available at http://www.mediafire.com/view/4nnado1byn1gr47/US-Energy-Storage-Monitor-Q2-2015-ES-Final.pdf. At p. 4

[7] *Ibid.*

[8] *Ibid., 10.*

[9] Response to Board Order Soliciting Proposed Rule Changes. Filed by Environmental Law & Policy Center, Iowa Environmental Council, and Interstate Renewable Energy Council, Inc., in Docket No. NOI-2014-0001 on February 16, 2015. At p. 8.

devices, FERC added storage to definition to improve transparency and to ensure that storage devices are interconnected in a just and reasonable and not unduly discriminatory manner."[10] Significantly, and similarly, staff noted that "the current definition of a distributed generation facility … includes a qualifying facility or an AEP facility and neither definition specifically includes or precludes storage facilities."[11] However, staff's declination to explicitly include energy-storage facilities in the definition of "distributed generation facility" diverges from FERC's decision to do so and does not appropriately take into account the rapid growth of distributed energy storage in the United States, as explained above.

TASC urges the Board to carefully review staff's determination, taking into account the rapid growth of energy storage in the United States, as well as FERC's decision to extend its SGIP to storage, and especially considering that FERC's SGIP serves as a model to many U.S. states. In addition, California's Rule 21 explicitly includes energy storage in the definition of "generating facility."[12]

**4. Whether interconnection review fees should be increased**

TASC supports staff's decision not to increase interconnection review fees in its proposed rule revisions. As TASC stated in previous comments, interconnection application fees should be based on actual demonstrated costs.[13] In particular, TASC

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[10] *Ibid., 34.*
[11] Recommendation for Revisions to the Board's Chapter 45 Rules. Filed by Iowa Utilities Board staff in Docket No. NOI-2014-0001 on August 5, 2015. At p. 28.
[12] Electric Rule No. 21, Generating Facility Interconnection. Available at http://www.pge.com/tariffs/tm2/pdf/ELEC_RULES_21.pdf. At sheet 21.
[13] Reply Comments on Proposed Rule Changes Regarding Certain Interconnection Issues of The Alliance for Solar Choice, filed in Docket No. NOI-2014-0001 on April 7, 2015. At p. 4.

maintains that for standard Level 1 and Level 2 interconnection application requests, standard fees based on demonstrated costs should apply.[14] This approach provides clarity and certainty to interconnection applicants, while also providing an incentive for utilities to establish efficient procedures and standard processes when handling such interconnection requests.[15]

In addition, TASC agrees with staff's determination that the addition of a pre-application process, which carries a non-refundable $300.00 fee, could further reduce a utility's time and associated costs to review interconnection application.[16] Lastly, as ELPC, IEC and IREC indicated in joint comments previously filed in this proceeding (and which TASC supported), if the Board allows utilities to utilize an online process for submitting applications and signatures, additional efficiencies and cost savings will result, further lowering interconnection costs.[17]

**5. The desirability of including in the rules what specific information the customer will receive in the pre-application report and the optional supplemental review process**

The revised rules proposed by staff contain language addressing pre-application reports that is very similar to the language in FERC's SGIP. However, unlike FERC, staff determined that the rules should not specify the information provided in the pre-application report, indicating that "the rules should be flexible

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[14] *Ibid.,* 5.
[15] *Ibid.*
[16] Recommendation for Revisions to the Board's Chapter 45 Rules. Filed by Iowa Utilities Board staff in Docket No. NOI-2014-0001 on August 5, 2015. At p. 32.
[17] Response to Board Order Soliciting Proposed Rule Changes. Filed by Environmental Law & Policy Center, Iowa Environmental Council, and Interstate Renewable Energy Council, Inc., in Docket No. NOI-2014-0001 on February 16, 2015. At p. 8.

to allow the utilities the ability to specify what information will be included in their pre-application report for a particular site." TASC believes that added "flexibility" can have merit, but, in the instant situation, clarity is necessary on what documents will be provided by the utility. Clarity will avoid confusion over what an applicant could expect for paying $300.00 and also avoid disputes between a customer and the utility. Moreover, customers could conclude that the uncertainty over what they may receive coupled with a $300.00 fee outweighs any potential benefits in obtaining a pre-application report. Such an outcome would undermine the very benefits the pre-application report is designed to support for both the applicant and the utility.

To ensure the benefits of a pre-application report are available to all stakeholders, TASC strongly recommends that Iowa's rules specify that a pre-application report should include all available information detailed in FERC's SGIP[18] or IREC's Model Interconnection Procedures,[19] both of which are very similar in addressing this issue. Iowa's investor-owned utilities are already subject to FERC's SGIP so they already must provide specific information when available in pre-application report in response to requests under FERC approved interconnection standards for Iowa utilities. Thus, there is no additional burden in having identical standards in Iowa's state interconnection standards. FERC's SGIP specifies that a

[18] Small Generator Interconnection Procedures (SGIP). Issued by Federal Energy Regulatory Commission on September 19, 2014. Available at http://www.ferc.gov/industries/electric/indus-act/gi/small-gen/SGIP-redline.pdf. At p. 8.

[19] Model Interconnection Procedures. Published by Interstate Renewable Energy Council, Inc. in 2013. Available at http://www.irecusa.org/wp-content/uploads/2014/11/2013-IREC-Interconnection-Model-Procedures-3.pdf. At pp. 4-5.

pre-application report will include the following information, where data already exists:[20]

- Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.
- Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.
- Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.
- Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
- Substation nominal distribution voltage and/or transmission nominal voltage if applicable.
- Nominal distribution circuit voltage at the proposed Point of Interconnection.
- Approximate circuit distance between the proposed Point of Interconnection and the substation.

[20] Small Generator Interconnection Procedures (SGIP). Issued by Federal Energy Regulatory Commission on September 19, 2014. Available at http://www.ferc.gov/industries/electric/indus-act/gi/small-gen/SGIP-redline.pdf. At pp. 3-5.

- Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 2.4.4.1.1 below and absolute minimum load, when available.
- Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.
- Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.
- Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.
- Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.
- Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

With respect to the supplemental review process, TASC strongly believes that the revised rules proposed by staff are inadequate, and it urges the Board to establish a stronger supplemental review process that is modeled on FERC's SGIP. Namely, TASC shares the concerns expressed in joint comments filed by ELPC, IEC and IREC that the existing 15% of maximum load screen could disqualify projects that otherwise could be connected safely and quickly, especially as DG-penetration

levels continue to rise.[21] Adopting the supplemental review provisions in FERC's SGIP, including a 100% of minimum load screen, would appropriately simplify the process for certain applicants, while preventing others from abandoning simple DG projects rather than pursuing interconnection under the complex and expensive Level 4 review process.

TASC would like to reemphasize that its order adopting the updated SGIP, FERC noted that in regions of the United States where the 15% screen has caused DG customers to fail the SGIP's Fast Track Process screens (which also apply to the 10 kW Inverter Process), the revised supplemental review will offer an opportunity to continue to be evaluated under the Fast Track Process, thereby helping customers avoid delays and unnecessary project costs.[22]

**6. Whether the no-construction screen should be removed in certain cases**

TASC strongly believes that Iowa's existing "no-construction screen" is too broad and ultimately serves as an obstacle to DG deployment. The phrase "construction of facilities" could easily be interpreted in a manner that disqualifies (from an otherwise appropriate level of review) a DG project that complies with all technical criteria applicable to the DG system itself. Accordingly, TASC supports the proposal by ELPC, IEC and IREC to remove the no-construction screen from each

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[21] Response to Board Order Soliciting Proposed Rule Changes. Filed by Environmental Law & Policy Center, Iowa Environmental Council, and Interstate Renewable Energy Council, Inc., in Docket No. NOI-2014-0001 on February 16, 2015. At p. 13-17.

[22] Order No. 792, Small Generator Interconnection Agreements and Procedures, issued by Federal Energy Regulatory Commission on November 22, 2013. (145 FERC ¶ 61,159.) At p. 19.

level of interconnection in Iowa's existing rules.[23] As ELPC, IEC and IREC have stated, "there are more efficient means to address the legitimate need to determine the cost and schedule for upgrades than sending an interconnection request that passes the other technical screens to the full study process, particularly where the required upgrades are minor."[24] TASC supports these parties' proposed amendments,[25] which appropriately remove the unnecessary no-construction screen and instead allow utilities more time to provide a cost estimate along with an interconnection agreement when a utility determines that upgrades are in fact necessary.

### 7. How customer-specific information can be protected with the disclosure of load information

TASC chooses not to address this subject at this time. TASC will address this subject in the form of reply comments if appropriate.

### 8. What happens if a project fails a level (is the project deemed withdrawn, subject to reapplication, or rolled over to a higher level of review)

If a proposed DG system fails the review level indicated by the applicant in an interconnection application request, the applicant should have the option of either agreeing to allow the application to "roll over" to a higher level of review, or resubmitting the application under the same review level. It is possible that an installer, when filling out a form that includes scores of data fields and other information that must be entered, might inadvertently overlook one or more fields,

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[23] *Ibid.,* 22-28.
[24] *Ibid.*
[25] *Ibid.,* 23-24.

or make a simple error when entering data into a field. Accordingly, it is reasonable to allow an applicant to resubmit an application if the originally application was not fully complete or contained a few simple errors. To reinforce a previous point made by TASC, we believe that the use of an online process for submitting applications and signatures would reduce the prevalence of applicant errors – as well as the need for utilities and applicants to address those errors.

Respectfully submitted this 6th day of November, 2015.

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For the Alliance for Solar Choice

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