DEPARTMENT OF
COMMERCE
COMMUNITY AND
ECONOMIC DEVELOPMENT

Regulatory Commission of Alaska

Sean Parnell, Governor
Susan Bell, Commissioner
Robert M. Pickett, Chairman

MEMORANDUM

To: Representative Mike Hawker, Chair
Legislative Budget and Audit Committee

Date: April 19, 2011

From: Ann Wilde
Commission Section Manager

Phone: 907-263-2163
Email: Ann.Wilde@alaska.gov

CC: Robert M. Pickett, Chairman
Regulatory Commission of Alaska

Subject: Quarterly report for January 1-March 31, 2011

Under AS 42.05.175(g), the Regulatory Commission of Alaska is required to file quarterly reports with the Legislative Budget and Audit Committee identifying all extensions ordered under AS 42.05.175(f).

Acting in accordance with AS 42.05.175(f) and with the consent of the parties, the Commission extended the statutory timeline in the following dockets:

U-10-056, *Order Extending Statutory Timeline With the Consent of Party,* dated January 14, 2011.

U-04-022/U-04-023, *Order Extending Statutory Timeline*, dated February 10, 2011.

U-04-022/U-04-023, *Order Extending Statutory Timeline*, dated March 24, 2011.

The Commission issued orders under AS 42.05.175(f)(1)-(3) in two dockets during this quarter.

R-09-002, *Order Inviting Public Comment and Extending Statutory Deadline*, dated February 4, 2011.

R-09-004, *Order Extending Statutory Deadline and Designating Commission Docket Manager*, dated February 23, 2011.

In accordance with AS 42.05.175(g), a copy of Order R-09-2(3) and Order R-09-4(5) are provided with this report. The dockets identified above may be viewed by entering the docket number in the "Find a Matter" box and clicking on the adjacent "Go" button on the Regulatory Commission of Alaska website at http://rca.alaska.gov/RCAWeb/home.aspx.

STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners: Robert M. Pickett, Chairman
Kate Giard
Paul F. Lisankie
T.W. Patch
Janis W. Wilson

In the Matter of the Consideration of the Adoption of Regulations Implementing an Interconnection Standard	R-09-2 ORDER NO. 3

ORDER INVITING PUBLIC COMMENT AND EXTENDING STATUTORY DEADLINE

BY THE COMMISSION:

We opened this docket to consider adopting regulations implementing interconnection standards.[1] At our January 26, 2011, public meeting Commission Staff (Staff) updated us on the progress of this docket and presented draft regulations for our consideration. Staff's memorandum is attached as Appendix A to this order. After the January 26, 2011, public meeting, Staff's draft regulations were revised to ensure that they are consistent with existing regulations related to interconnection. The revised draft regulations are attached as Appendix B to this order.

We recently adopted rules containing net metering standards which include a requirement for interconnection by the utility.[2] To further the purposes of the net metering standards and to simplify the process of accomplishing interconnection of

[1] Order R-06-5(8)/R-09-1(1)/R-09-2(1), *Order Closing Docket, Opening Dockets, Subsuming Applicable Portions of Docket R-06-5 Record into Dockets R-09-1 and R-09-2, Scheduling Technical Conferences, and Requiring Filings,* dated February 6, 2009.

[2] *See* R-09-1(4), *Order Readopting Regulations,* dated April 26, 2010.

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small customer-owned renewable energy projects with a capacity of up to 25 kW with utilities, it may be helpful for each utility to which the net metering standards apply to have on file with us an approved tariff containing interconnection rules and an application form meeting minimum standards. The attached proposed regulations require the filing of tariff revisions containing conforming rules and application forms.

We invite public comment and reply comment regarding our consideration to adopt, decline to adopt, or adopt modified or different standards as set forth in the regulations implementing an interconnection standard. All comments should reference Docket R-09-2.[3] Reply comments must be directly responsive to the initial comments and may not raise new issues. Because this is a rulemaking proceeding, commenters need not serve their comments on the other persons on the service list. We will post copies of all filed comments on our website: http://rca.alaska.gov/RCAWeb/home.aspx. Those seeking to obtain the materials at the website must select *All Open Rule-making Dockets* under *Top Searches,* and choose matter number R-09-002.

We may extend the statutory timeline for completing a regulations docket one time if, before it expires, we find good cause to extend the timeline, we issue a written order extending the timeline and setting out our findings of good cause, and the extension is for 90 days or less.[4] At our January 26, 2011, public meeting we decided to extend the statutory timeline in this docket for 90 days to allow us to seek comments

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[3]Comments may be filed at the commission's offices or submitted electronically at https://rca.alaska.gov/RCAWeb/WhatsNew/PublicNoticesComments.aspx. We encourage commenters to file comments electronically via our website. Individuals or groups of people with disabilities who require special accommodations, auxiliary aids or service, or alternative communication formats to comment, please contact Joyce McGowan at (907) 276-6222, toll-free at 1-800-390-2782, or TTY (907) 276-4533, or send a request via electronic mail to rca.mail@alaska.gov.

[4]AS 42.05.175(f).

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on the proposed interconnection rules.[5] The extension of the deadline also provides necessary time to reach a decision on adoption of interconnection standards. Accordingly, on our own motion, we find good cause to extend the deadline in this docket for 90 days from February 4, 2011, to May 5, 2011.

ORDER

THE COMMISSION FURTHER ORDERS:

1. The proposed regulations set out in Appendix B to this order are issued for public comment.[6]

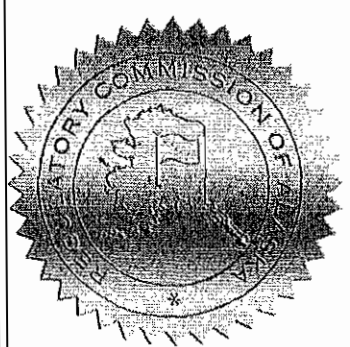
2. By 4 p.m., March 4, 2011, any interested person may file comments to the proposed regulations. Comments should reference Docket R-09-2.

3. By 4 p.m., March 16, 2011, any interested person may file comments in reply to comments filed by others. Reply comments should reference Docket R-09-2.

4. The statutory timeline in this proceeding is extended to May 5, 2011.

DATED AND EFFECTIVE at Anchorage, Alaska, this 4th day of February, 2011.

BY DIRECTION OF THE COMMISSION



[5] See January 26, 2011, Public Meeting at 32, 35.

[6] If you are not interested in receiving future orders or notices concerning this subject matter, please e-mail rca.mail@alaska.gov or notify our office by mail at 701 West 8th Avenue, Suite 300, Anchorage, Alaska 99501-3469, or at 1-907-276-6222.

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R-09-2 – Staff Report Accompanying Draft Regulations

Procedural Background

In Docket R-06-5, the commission declined to adopt the specific interconnection standard proposed by the 2005 EPAct,[1] which requires that interconnection services be offered based on standards developed by the Institute of Electrical and Electronics Engineers (IEEE): IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems (IEEE Standard 1547).[2]

The commission committed to crafting an interconnection policy suited to Alaska energy needs, recognizing that certain aspects of the IEEE Standard 1547 may not be applicable to Alaska given the isolation of our grid and the smaller size of our electrical utilities.[3] The commission held a workshop to discuss an Alaska-specific interconnection standard,[4] and received a report from workshop participants.

The commission opened Docket R-09-2 to consider adopting regulations implementing an interconnection standard and subsumed the Docket R-06-5 record on interconnection standards into Docket R-09-2. The commission's goal in this docket (R-09-2), as stated in Order R-06-5(8)/R-09-1(1)/R-09-2(1), is to create an interconnection standard that recognizes Alaskan conditions, provides uniformity in interconnection requirements of Alaskan electrical utilities, and simplifies the interconnection process for small distributed resources.

Interconnection service requires a utility to allow an electric consumer to connect an on-site generation facility to the local electric distribution facilities. Interconnection standards are necessary to ensure that the addition of consumer-generation to an electric utility's system will not have negative impacts on safety, power quality, or reliability.

Within Order 1, the commission scheduled a technical conference to discuss the current IEEE 1547 standard. Specifically, technical conference attendees were asked to:

- identify specific areas in IEEE 1547 which are not appropriate in Alaska or may need to be modified to meet unique Alaskan conditions;
- identify any issues not contained within IEEE 1547 that should be included in an interconnection rule and suggest specific language; and
- comment on which utilities should be subject to interconnection regulations.

The technical conference convened on March 18, 2009. Generally, all participants supported the IEEE 1547 standard but specific circumstances were mentioned in which an exception may need to be made. There was not sufficient specificity nor technical

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[1] See Order R-06-5(4).

[2] The purpose of IEEE Standard 1547 is to provide a voluntary model for connecting customer distributing generators and related equipment to the electrical grid.

[3] Order R-06-5(4) at 6.

[4] That workshop convened on September 19, 2007.

expertise presented to include the exceptions within a rule. Other issues such as the requirement for an external disconnect switch and additional insurance were discussed for potential inclusion within an interconnection rule.

Staff returned to the commission at a July 29, 2009 public meeting and presented a straw man proposal of an interconnection standard. The commission issued the straw man proposal to the public and scheduled a technical conference for July 12, 2010 to discuss the proposal.[5] The commission also directed attendees to file a consensus report if possible or separate reports if necessary.

New Developments

In comments filed with the commission[6] Alaska Power Association (APA) made note that FERC Order No. 732 was issued on March 19, 2010, exempting non-utility generators of 1 MW and less from the requirement to self-certify with FERC. Staff believes that the commission's existing definition of "eligible consumer generation systems," applicable to net metering customers fits within the FERC definition of a qualifying facility (QF). Thus, all net metering consumers are by definition QF's without the requirement to file any paperwork with FERC. All commission regulations pertaining to QF's, therefore, apply to net metering consumers. This specifically includes 3 AAC 50.750 through 50.820.[7]

Staff does not believe the existing QF regulations contain all of the nuances addressed at both technical conferences and in filings within this proceeding. The overlap does create an unanticipated degree of complexity as existing regulations may need to be altered to comport with the regulations proposed by Staff. The proposed revisions to existing regulations will be addressed later in this memo.

Summary of Consensus Reports and Staff Analysis

Three sets of comments were filed with the commission after the July 12, 2010 technical conference. Two of the filings, made by the APA[8] and the National Wildlife Federation (NWF),[9] are reports commenting on the straw man and summarizing opposing viewpoints on some of the issues addressed at the technical conference. The NWF comments were the result of collaboration with some of the technical conference attendees, including Andy Baker, Peter McKay, and Kaarle Strailey. One of the filings,

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[5] Order R-09-2(2), *Order Scheduling Technical Conference*, issued June 11, 2010.
[6] *Report Regarding July 12, 2010 Technical Conference for Alaska Power Association*, filed August 16, 2010.
[7] 3 AAC 50.750 through 3 AAC 50.820 address among other things interconnection, purchases, sales, implementation, disconnection, and disputes between regulated electric utilities and qualifying facilities.
[8] *Report Regarding July 12, 2010 Technical Conference for Alaska Power Association*, filed August 16, 2010.
[9] *Comments for National Wildlife Federation*, filed August 16, 2010.

made by Mr. Harvey Bowers of Wasilla, Alaska, voices support for the report filed by the NWF.[10]

In the summary and analysis below, Staff will set forth the pertinent section of the straw man proposal, a summary of the reports from APA and NWF, and finally Staff comments and recommendation in response to the reports.

Goals

Straw Man - Goals

The straw man proposal attempts to meet the following goals:

- Insure that distributed generation (DG) systems interconnecting to electric power systems will not degrade system performance or pose a safety hazard;
- Utilize national standards that will allow Alaskans the broadest choice of commercially available equipment, constructed to meet those standards;
- Allow Alaskan utilities the flexibility needed to address electrical system-specific issues on a case-by-case basis;
- Integrate with the net metering standards proposed by the RCA in Docket R-09-1; and
- Limit the financial and administrative burden placed on the net metering systems.

APA Comments – Goals

APA believes the goals represent the proposal for the "purpose" section of new interconnection regulations. APA only took issue with the fifth goal in regards to limiting the financial and administrative burden placed on net metering systems. APA believes the fifth goal is unnecessary and also expressly singles out a customer class for preferential protections.

Additionally, APA believes the straw man proposal's reference to "distributed generation" or DG should be changed to "non-utility generation" systems. APA believes the term, "DG" is too broad because it could include generation owned by a utility and also too narrow because it implies interconnection only at distribution voltage.

NWF Comments – Goals

NWF made no comments on the straw man goals.

Staff Response – Goals

Staff concurs that the fifth goal expressed in the straw man proposal may pose a problem, especially as it may create a class of customer receiving preferential and thereby discriminatory services or rates. This runs counter to the commission's statutory guidance.[11] Staff's intention in writing the goal is to prevent the adoption of unreasonable financial and administrative burdens on net metering systems. Staff believes it appropriate to remove the goal altogether.

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[10] Public Comments of H. Bowers for R-09-2, filed August 19, 2010.

[11] See AS 42.05.201, Discrimination in service and AS 42.05.391, Discrimination in rates.

Regarding the use of the term "non-utility generation" systems rather than DG, Staff believes APA raises valid concerns and uses the term, "non-utility generation" in the proposed regulations.

Staff does not recommend the use of a purpose section in the proposed regulation, but outlined the goals as a means of focusing the discussion at the technical conference and providing guidance for the resulting regulation.

Regulatory Placement

Straw Man – Regulatory Placement

The new interconnection regulations should be included in 3 AAC 52.485, entitled, "Safety standards for interconnection to qualified cogenerators and small power producers."

APA Comments – Regulatory Placement

APA suggested that 3 AAC 52.485 was not the appropriate place to add interconnection regulations because the title, "Safety standards for interconnection..." is limiting and does not encompass the breadth of what has been considered. APA recommended the creation of a new section within Article 5 of Chapter 52 for the interconnection regulations.

APA also cited existing commission regulations that may conflict with some of the suggestions made in the straw man proposal.

NWF Comments – Regulatory Placement

NWF made no comments on the regulatory placement.

Staff Response – Regulatory Placement

Staff concurs with APA that 3 AAC 52.485, as it is currently titled, is not an appropriate location for the new interconnection regulations. As almost all of the comments filed in this proceeding pertain to the use of interconnection regulations for net metering customers, Staff believes it most appropriate to include the regulations within Article 3 of Chapter 50, the Net Metering Standards. Specifically, 3 AAC 50.940 is entitled, "Interconnection of eligible consumer generation systems."

The current regulation at 3 AAC 50.940 states, "Until the commission adopts by regulation safety, power quality, and interconnection requirements for eligible consumer generation systems, the electric utility shall provide in its tariff for the requirements necessary to protect safety and system reliability."

This language serves a placeholder for future interconnection rules and would need to be updated to reflect any interconnection rules pertaining to net metering as a result of this proceeding. By placing the interconnection rules in 3 AAC 50.940, they would be applied exclusively to utilities serving net metering consumers. Utilities are already allowed to include interconnection rules in their tariff for larger interconnecting

distributed generation, and some have chosen to do so.[12] Staff does not see a need to implement interconnection regulations for non-utility generation larger than 25 kW at this time.

Applicability

Straw Man - Applicability

The proposed rule should apply to all economically-regulated electric utilities interconnecting with DG with a capacity of up to 10 MW.

APA Comments – Applicability

APA recommends the commission further limit the applicability of the regulations to those utilities implicated under the recently approved net metering regulations.[13] APA provided four reasons as support for its position:

1. this would be consistent with the stated goal of integrating the interconnection standards with the net metering regulations;
2. most of the interested parties to this proceeding are primarily concerned with the clarity of interconnection rules for the purpose of promoting net metering;
3. it would be less controversial to only apply the standards to the larger utilities already required to provide net metering service; and
4. standardized, mandatory interconnection requirements for up to non-utility generators up to 10 MW is very difficult, whereas standardizing interconnection requirements for non-utility generators up to 25 kW is more realistic.

NWF Comments – Applicability

NWF recommended the commission apply interconnection regulations to all economically regulated utilities interconnecting with DG with capacity of up to 1 MW.

Staff Response – Applicability

Staff believes APA raises some valid points regarding limiting the applicability of the regulations to utilities implicated under the existing net metering regulations. To be required to allow net metering, a utility must sell 5,000,000 kWh or more of electricity each year. Based on Staff's latest assessment, only nine of 37 economically regulated electric utilities meet this threshold. Some of the economically regulated electric utilities that do not meet this threshold are simply too small be able to handle the interconnection of non-utility generation of appreciable size.

Regarding the upper limits of non-utility generation addressed in the regulation, Staff notes that the national standards reviewed in this proceeding address interconnections up to 10 MW. They can be used by utilities for the interconnection of larger non-utility generation. As discussed in the previous section, most of the interest in this proceeding has pertained to interconnection rules for net metering. Staff therefore believes placing

[12] See TA-308-121, recently approved by the commission for Municipal Light & Power, and TA-297-8 and U-08-138, in which interconnection rules were approved for Chugach Electric Association, Inc.

[13] Chapter 50, Article 3, Net Metering Standards: 3 AAC 50.900 through 3 AAC 50.949.

the rules in 3 AAC 50.940 and limiting their applicability to utilities required to allow net metering is appropriate.

External Disconnect Switch (EDS)

Straw Man - EDS

For DG with a capacity of 25 kW[14] or less, an external disconnect switch may be required by the utility and installed at the utility's expense.

For DG with a capacity above 25 kW, an external disconnect switch may be required by the utility. Responsibility for payment of the EDS must be negotiated by the parties and included as a provision within a power purchase agreement.

APA Comments – EDS

APA summarized the technical conference discussion regarding the need for an EDS, who would pay for an EDS, and finally where an EDS would be located. APA offered what it believes is a reasonable compromise agreed to by most of the utility participants:

1. The utility may require an EDS to be located in a location that is readily accessible by utility personnel, as determined by the utility.
2. If the location determined under (1) is (a) within five feet of the customer's meter base, (b) at the customer's main structure (e.g., the house), or (c) as otherwise agreed to between the utility and the customer, the utility may require the customer to pay for the installed cost of the EDS and necessary wiring.
3. If the location determined under (1) is any other location, then the utility may require the customer to pay for the installed cost of the EDS, but the utility shall pay for necessary wiring.
4. If the customer agrees that, in the event of the utility's need to disconnect the customer's non-utility generation from the utility's system, the utility may disconnect from the utility's system both the non-utility generation equipment and the customer's load, then the customer would not be required to pay EDS costs (because the utility could disconnect both the non-utility generation and the customer's load from the utility's system solely through the utility's existing equipment).

NWF Comments – EDS

NWF supports the language of the straw man providing that utilities may require an EDS for systems of 25 kW capacity or less to be installed at the utility's expense. NWF also supports the existing Golden Valley Electric Association, Inc. (GVEA) policy requiring the customer to provide an external, lockable and accessible disconnect switch provided that the utility does not dictate the location of the switch (e.g., at the house meter, as discussed at the workshop).

[14] The 25 kW limit was designed to comport with the draft net metering regulations.

Staff Response – EDS

An EDS is a utility-accessible disconnect switch, usually located within sight of the revenue meter. It provides a "visible open" to the circuit and can be locked in place.[15] This is an additional level of safety and accessibility for the utility so that non-utility generation can be manually disconnected from the electric power system during maintenance, troubleshooting, or when there is a disruption to service.

There is a diversity of opinion around the country regarding whether the costs of EDS units should be borne by the customer or the utility. Existing regulations for QF's require a minimally acceptable level of access to customer premises and safety features that protect utility workers.[16]

The National Electric Code (NEC), adopted by the RCA as the electrical standard for installation and operation of electric utilities,[17] already requires that a means of disconnection be readily accessible, but does not specify that the means of disconnection be available to utility personnel or outdoors. RCA regulations require, however, that the utility include the terms of their access to customer premises within their tariff.[18]

A utility would typically seek to disconnect non-utility generation for the purposes of construction and maintenance or in the event of a service disruption. The NEC, already adopted by the commission, requires that an inverter de-energize its output to the grid in the event of a service disruption and remain in that state until service is resumed.[19] IEEE 1547 does not allow DG to flow power to an electrical system when it is de-

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[15] Based on discussions with utility personnel, some electrical labor contracts require a visible open to a switch for linemen working on a line.

[16] 3 AAC 52.485(b) states: "No utility may interconnect with a qualifying facility that does not provide a means of disconnecting with provision for padlocking in the open position by the utility. This device, or a supplementary device, must be capable of switching under full load conditions and must be clearly labeled and accessible to utility personnel."

[17] 3 AAC 52.470(b) – "A utility shall design, construct, and maintain generation, transmission, and distribution facilities in conformance with the state minimum electrical safety standards as adopted in AS 18.60.580."
AS 18.60.580 – "After the American National Standards Institute approves a new, published edition of the National Electrical Code or a new, published edition of the National Electrical Safety Code, the Department of Labor and Workforce Development may, by regulation, adopt the most recent codes to constitute the minimum electrical safety standards of the state."

[18] 3 AAC 48.370(10).

[19] An inverter is an electrical device that converts direct current (DC) to alternating current (AC). Most DG produce power in DC, which must be converted to AC before it can be consumed by the customer or flow to the grid.

energized.[20] Furthermore, UL 1741 requires that under all abnormal or grid-outage conditions, a UL-listed inverter disconnects in two seconds or less and only reconnects after five minutes of normal utility conditions. Staff believes the existing NEC code and utility tariffs, along with the adoption of the IEEE 1547 and UL 1741 would provide a safety standard that would have to be met by the customer and would provide reasonable assurances to the utility that the DG would not flow power through the distribution or transmission lines while they are de-energized.

Staff recognizes a utility may desire to have the ease of access and additional level of safety provided by an EDS. The commission should allow the installation of an EDS. In fact, IEEE 1547 states that when required by an electrical utility an isolation device (EDS) must be located between the DG and the electrical system.[21] At the technical conference, Mr. Bob Seitz, of Artech Engineering, stated that an EDS for a system 25 kW or smaller will typically cost $100 or less.[22] For a customer installing a system that typically costs several thousand dollars, the incremental cost for the EDS should not be an unreasonable burden.

Greater expense can arise if the utility desires the EDS to be located a significant distance from the meter and generation, for the convenience of utility personnel. The language proposed by APA places the financial burden of wiring on the utility when it desires to locate the EDS a significant distance away from the meter base or the customer's main structure. Staff incorporated the substance of APA's proposed language into the draft regulation.

Additional Insurance Requirements

Straw Man – Insurance Requirements

For DG of 25 kW or less, no insurance is required above a standard homeowner's policy or commercial business policy.

For DG with a capacity above 25 kW, the parties may negotiate whether insurance should be required and include the provisions in a power purchase agreement.

APA Comments – Insurance Requirements

APA believes the straw language proposal is unreasonably vague for commission regulations. For example, what is a "standard" homeowner's or commercial business policy? APA also believes it precludes a utility and third parties from having any benefit of a reasonable liability insurance requirement. APA's initial research into this subject indicates the following:

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[20] IEEE 1547 4.1.5, Inadvertent energization of the Area EPS – "The DR shall not energize the Area EPS when the Area EPS is de-energized."

[21] IEEE 1547, 4.1.7, Isolation device – "When required by the Area EPS operating practices, a readily accessible, lockable, visible-break isolation device shall be located between the Area EPS and the DR unit."

[22] Transcript of July 12, 2010 Technical Conference, at 181-182.

1. Dozens of state utility commissions have regulations or approved interconnection agreements/standards requiring non-utility generators to have liability insurance coverage ranging from $100,000 for small residential units to $2 million for larger systems.
2. It appears the typical homeowner's insurance policies available in Anchorage do not currently exclude liability coverage for homeowner-owned electric generation systems, and such policies typically provide base liability coverage in the amount of $300,000.
3. Most customers who have the financial wherewithal to invest in a non-utility generation system that may cost $50,000 or more have the financial ability and incentive to purchase insurance with general liability coverage.

APA recommends the new regulations require proof of a reasonable level of liability insurance coverage as a condition of interconnection of the utility's system with a non-utility generation system.

NWF Comments – Insurance Requirements
NWF supports the language of the straw man stating that no insurance is required beyond the standard homeowner's or commercial business policy for systems 25 kW capacity or less. NWF states that because there has never been an instance of damages from an inverter-based renewable energy system, requiring additional insurance would add unnecessary expense to the project and unnecessary administrative costs to the utility.

Staff Response – Insurance Requirements
Staff believes both sets of comments reflect a consensus that a reasonable amount of commercially available insurance is an acceptable requirement for small non-utility generators seeking to interconnect with a utility. Ideally, this coverage already exists within their standard homeowner's or commercial business policy.

There are several complexities associated with becoming specific in this regulation regarding insurance because there are so many unknowns. APA stated that their initial inquiry into homeowner's policies available in the Anchorage area demonstrated that they do not exclude private generation systems and typically provide a reasonable amount of base liability coverage. It is unknown whether such policies are available throughout the other Railbelt communities or in more isolated rural communities where these regulations may apply.

Additionally, defining the specific amount of liability coverage to require in regulation is problematic because the potential scope of damage may vary from utility to utility. For a robust Railbelt utility, the interconnection of a 25 kW generator may not pose much liability because of the safety mechanisms on the system. Comparatively, there may be greater risk to a smaller rural utility when a 25 kW generator interconnects.

Finally, distributed generation is becoming more common throughout the United States. As more individuals and businesses interconnect generation with their local grid,

understanding of liability will develop and may be reflected by changes in insurance policies.

Staff believes it would be most appropriate for the commission to adopt very general regulations regarding insurance requirements. Specifically, Staff suggests the commission allow utilities to require reasonable liability insurance coverage that is commercially available to their customers. What is reasonable and available in one community may not be in another. Utilities should be required to set forth the specific rule in their tariff, which will be subject to commission approval.

Standard Agreement

Straw Man – Standard Agreement

A standard interconnection agreement for interconnecting DG of 25 kW or less must be included in the utility's tariff.

For DG with a capacity above 25 kW, the utility may either develop a standard agreement to include in its tariff or develop agreements on a case-by-case basis.

APA Comments – Standard Agreement

APA states that the utilities do not object to the requirement that each covered utility have a standard interconnection agreement in its tariff for non-utility generators of 25 kW or less. The utilities do object, however, to the idea that the new regulations would require a uniform, state-wide standard agreement that each covered utility would be compelled to adopt.

NWF Comments – Standard Agreement

NWF supports the proposed straw man language and urges the commission to adopt a standard statewide agreement as part of the interconnection regulations so that the agreement does not vary from utility to utility.

Staff Response – Standard Agreement

Given the diversity of electric utilities regulated by the commission, Staff believes a uniform statewide standard interconnection agreement would be problematic. Additionally, there is little record developed in this proceeding discussing what should be in that agreement.

Staff does believe each utility should be required to file in its tariff an interconnection application for net metering customers. Additionally, the application itself should be relatively short, approximately two pages or less.[23] Requiring each utility to create its own application and focus on minimizing and streamlining the process should provide adequate protection for both utility and customer interests.

[23] The net metering interconnection applications approved by the commission for the ML&P and Chugach tariffs are two pages long.

National Standards

Straw Man – National Standards

The commission should require the interconnecting DG systems to meet the requirements of the NEC, NESC, IEEE 1547, IEEE 1547.1, IEEE 1547.2, IEEE 1547.3, and the UL 1741. Exceptions to these rules may be presented to the commission for consideration on a case-by-case basis by a petition from the utility or the interconnecting DG power provider.

APA Comments – National Standards

APA believes much of any dispute regarding the applicability of the national standards listed in the straw man proposal can be resolved by limiting the reference to "the applicable" requirements of the listed standards. With the addition of, "the applicable," APA believes all of the national standards listed in the straw man proposal, in addition to IEEE 929[24] and IEEE 519[25] should be listed and adopted in the interconnection regulations.

NWF Comments – National Standards

NWF made no comments on the national standards.

Staff Response – National Standards

Staff believes APA's suggestions are reasonable and that the addition of the phrase, "the applicable" maintains the usefulness of the standards while providing necessary flexibility. In discussing the adoption of the national standards with Assistant Attorney General Stuart Goering, Staff has discovered that there are inherent complications to adopting specific national standards. First, the commission must purchase and maintain a copy of the standards at our office and send a copy of the standards to the Lieutenant Governor's office when the final approved standards are submitted for signature. This would be extremely costly.[26] Secondly, the standards remain static in our regulations and are not updated contemporaneously with national updates to the standards.

A potential less-costly solution is to adopt language requiring the use of the applicable portions of national standards such as IEEE 1547, IEEE 1547.1, etc. This language would potentially avoid the requirement to purchase copies of the standards and would allow revised standards to be used in the future without requiring an update to our regulations.

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[24] IEEE 929 is the "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems."

[25] IEEE 519 is the "Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems."

[26] On January 24, 2011, Staff checked online and found the following prices for the purchase of the listed standards: IEEE 1547 - $95; 1547.1 - $76; IEEE 1547.2 - $105; 1547.3 - $129; UL 1741 - $897; IEEE 929 - $105, and IEEE 519 - $143. One copy of these regulations would cost $1,550 and the two copies required would cost $3,100.

Interconnection Limitations

Straw Man – Interconnection Limitations

A utility is not required to interconnect with a DG facility that fails to conform to the standards adopted by the RCA or to the extent that the utility demonstrates that interconnection poses a risk to system stability, safety, or quality of service to other customers.

APA Comments – Interconnection Limitations

APA made no comments on the interconnection limitations.

NWF Comments – Interconnection Limitations

NWF made no comments on the interconnection limitations.

Staff Response – Interconnection Limitations

None of the interested parties made comments on the proposed interconnection limitations. Staff questions whether additional language need be adopted in new regulations. Staff believes existing regulations may be sufficiently comprehensive to resolve any concerns. Specifically, 3 AAC 50.760(b)(2),[27] 3 AAC 50.800(a),[28] and 3 AAC 50.900(b)(3)[29] provide exclusions by which a utility may deny interconnection or disconnect from a non-utility generator.

Potential Revisions to Existing Regulations

As mentioned above, Staff believes some existing regulations may need to be amended to harmonize with the new regulations proposed by Staff. Due to time constraints, Staff has not reviewed these regulations with the assistant attorneys general to determine what changes may need to be made. The regulations Staff has identified for consideration to date are as follows:

- 3 AAC 52.485(b) – May need to be modified to allow for a utility to waive the requirement for an external disconnect switch for net metering consumers.

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[27] 3 AAC 50.760(b)(2) – Notwithstanding (a) of this section, an electric utility is not required to interconnect with a qualifying facility if … a qualifying facility does not comply with the safety and reliability standards prescribed for interconnection by the commission.

[28] 3 AAC 50.800(a) – An electric utility has the right to disconnect a qualifying facility without notice if a hazardous condition exists in the equipment of the qualifying facility and immediate action is necessary to protect persons, utility facilities, or other customers' facilities from damage or interference imminently likely to result from the hazardous condition.

[29] 3 AAC 50.900(b)(3) – The net metering requirements set out in 3 AAC 50.900 – 3 AAC 949 do not apply to… any portion of the distribution system of an electric utility that is subject to economic regulation, if the electric utility demonstrates to the commission that limiting net metering installations in that portion of its distribution system is reasonably necessary to address system stability constraints or other operational issues.

- 3 AAC 50.760(c) – May need to be modified to point to new regulations or the utility's tariff (i.e., who pays for an external disconnect switch).

- 3 AAC 50.760(d) – May need to be modified to set limitations based on new regulations (i.e., who pays for what).

- 3 AAC 50.770(b)(1) – May need to be modified to accommodate net metering.

- 3 AAC 50.790(a) – This may not need to be modified, but our interconnection regulations may intersect with these to some degree as we are refining what some of the charges, terms, and conditions might be.

Statutory Timeline

The statutory timeline for this proceeding is currently scheduled to end on February 4, 2011. There is not sufficient time for the draft regulations to be noticed to the public and brought back to the commission for a decision in that timeframe. Staff recommends the commission exercise its discretion under AS 42.05.175(f) to extend the timeline in this proceeding by 90 days.

Register _____, _____ 2011 COMMERCE, COMMUNITY, AND EC. DEV.

3 AAC 50.940 is repealed and readopted to read:

3 AAC 50.940. Interconnection of eligible consumer generation systems. ~~Until the commission adopts by regulation safety, power quality, and interconnection requirements for eligible consumer generation systems, the electric utility shall provide in its tariff for the requirements necessary to protect public safety and system reliability.~~

(a) By (6 months after regulation take effect), each electric utility required by 3 AAC 50.900 to provide net metering services shall submit a tariff revision to incorporate interconnection rules for eligible consumer generation systems. The interconnection rules must

(1) address any requirements for liability insurance coverage, provided such coverage is readily available and of a reasonable cost to the consumer;

(2) set forth rules regarding the installation of an external disconnect switch in accordance with the following requirements:

(A) the external disconnect switch must be installed in a location readily accessible by utility personnel, as determined by the utility; or

(B) the utility may waive the requirement for the consumer to install an external disconnect switch if the consumer agrees to allow the utility to disconnect the consumer's non-utility generation and the consumer's load in the event of an emergency;

(3) set forth rules regarding the allocation of costs for the installation of the external disconnection switch in accordance with the following requirements:

(A) the utility may require the consumer to pay for the installed cost

of the external disconnect switch and necessary wiring if the location determined under (2)(A) of this section is

(i) within five feet of the consumer's meter base;

(ii) at the consumer's main structure; or

(iii) at a location otherwise agreed to between the utility and the consumer;

(B) the utility may require the consumer to pay for the installed cost of the external disconnect switch but the utility must pay for necessary wiring if the installed location of the external disconnect switch is any other location than prescribed in (3)(A) of this section;

(4) include an application form for interconnection of eligible consumer generation systems that is no more than two pages;

(5) be based on national standards, as applicable, establishing

(A) the criteria and requirements for interconnection of non-utility generation with electric power systems, such as the IEEE 1547 series;

(B) requirements for inverters, converters, controllers, and interconnection system equipment for use by non-utility generation, such as UL 1741;

(b) Upon approval of an application for interconnection of an eligible consumer generator by the utility, the rights and obligations of the consumer and utility are governed by the provisions of 3 AAC 50.900 - 3 AAC 50.949 and not the provisions of 3 AAC 50.750 – 3 AAC 50.820. (Eff. 6/16/2010, Register 194; am ___/___/_____,

Register _____, _____ 2011 COMMERCE, COMMUNITY, AND EC. DEV.

Register _____)

Authority: AS 42.05.141 AS 42.05.291 AS 42.05.321

AS 42.05.151 AS 42.05.311 AS 42.05.411

3 AAC 50.949 is amended to read:

(26) "external disconnect switch" means a visible and lockable device used by the utility to isolate a consumer generation system from the utility electric system during routine or emergency maintenance by utility personnel.

(Eff. 6/16/2010, Register 194; am ___/___/_____, Register _____)

Authority: AS 42.05.141 AS 42.05.151

STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners: Robert M. Pickett, Chairman
Kate Giard
Paul F. Lisankie
T.W. Patch
Janis W. Wilson

In the Matter of the Consideration of the Adoption of Regulations Implementing Electronic Filing

R-09-4

ORDER NO. 5

ORDER EXTENDING STATUTORY DEADLINE AND DESIGNATING COMMISSION DOCKET MANAGER

BY THE COMMISSION:

We opened Docket R-09-4 on March 17, 2009, to consider regulations to implement electronic filing with the Commission.[1] Under AS.42.05.175(e), we are required to issue a final decision regarding this docket not later than 730 days after initiating an order in this proceeding. Therefore, we are required to issue a final order no later than March 17, 2011.

We may for good cause extend a statutory timeline.[2] At the January 12, 2011, public meeting, we determined that good cause exists to extend the statutory deadline for Docket R-09-4 and voted to extend the statutory timeline for 90 days.[3] Additional time is necessary to conclude our review of the issues in this docket due to the complexity of developing regulations associated with electronic filing and the impact

[1]Order R-09-4(1), *Order Opening Docket and Scheduling Technical Conferences,* dated March 17, 2009.

[2]AS 42.05.175(f).

[3]*See* January 12, 2011, Public Meeting transcript (Tr.) at 31-33.

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our electronic filing regulations may have on those who file with us.[4] This docket deals with a wide spectrum of issues, including public access to information, how parties and other interested entities submit filings, and archiving obligations. We need to carefully assess competing interests since our processing and acceptance of incoming filings can affect the due process rights of those appearing before us. While extensive work has been underway, outstanding issues remain that cannot be resolved by March 17, 2011. Extending the statutory deadline will provide us necessary time to reach a well-reasoned decision on electronic filing rules that would affect entities that conduct business with us. Accordingly, on our own motion, we find good cause to extend the deadline in this docket 90 days, from March 17, 2011, to June 15, 2011.

At the January 12, 2011, public meeting, the chairman[5] designated Commissioner Kate Giard as the commission docket manager for this proceeding.[6]

ORDER

THE COMMISSION FURTHER ORDERS:

1. The statutory timeline in this proceeding is extended to June 15, 2011, for good cause.

[4]To illustrate this complexity, it is our understanding that the Federal Energy Regulatory Commission took roughly ten years to complete its electronic filing regulations. As another example, the draft regulations we previously released for public comment were 23 pages long. *See* Order R-09-4(3), *Order Issuing Proposed Regulations for Comment,* at Appendix, dated March 1, 2010.

[5]Under AS 42.04.080(a), the chairman designates a commission panel to hear, or if a hearing is not required, to otherwise consider and decide docket matters.

[6]Tr. 31.

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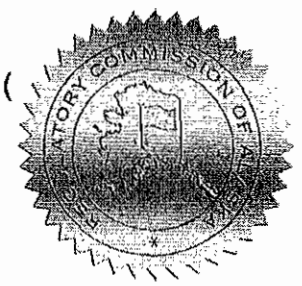
2. Commissioner Kate Giard is designated as the commission docket manager.

DATED AND EFFECTIVE at Anchorage, Alaska, this 23rd day of February, 2011.

BY DIRECTION OF THE COMMISSION



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