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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 Net Metering)

R-09-1

ORDER NO. 4

ORDER READOPTING REGULATIONS

BY THE COMMISSION:

Summary

We readopt regulations establishing net metering requirements to incorporate editorial changes made by the Department of Law.

Background

We adopted regulations implementing net metering at our October 14, 2009, public meeting, and subsequently issued an order formalizing adoption of the regulations.¹ We transmitted the regulations to the Department of Law for review. The Department of Law made edits to the regulations that we considered at our April 13, 2010, public meeting.²

¹See Order R-09-1(3), dated January 15, 2010, and titled *Order Adopting Regulations*.

²A copy of the regulations approved at our April 13, 2010, public meeting are attached as an appendix.

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Discussion

The Department of Law edited our net metering regulations to clarify language and ensure consistent terminology. The Department of Law also made stylistic changes complying with the *Drafting Manual for Administrative Regulations* adopted by Department of Law under AS 44.62.050. More significant Department of Law revisions are discussed below.

Waiver Provisions

As initially adopted, the net metering regulations included a provision that allowed modification or waiver of any part of our net metering regulations on our own motion or upon application and a good cause showing.³ The Department of Law added a provision stating that any requirement of the net metering regulations that is also required by AS 42.05 may be modified or waived upon application and a showing that waiver is in the public interest.⁴

Interconnection Standards

As initially adopted, the net metering regulations required utilities to interconnect with net metering customers in accordance with interconnection standards “approved or accepted by this commission.”⁵ The Department of Law revised this section to specify that utilities are required to interconnect with net metering customers in accordance with interconnection standards “contained in the electric utility’s tariff.”⁶ A similar revision was made to our section addressing interconnection of net metering facilities, which previously stated that we may adopt regulations addressing

³Order R-09-1(3), Appendix A at 1 (3 AAC 50.900(c)).

⁴Appendix at 1 (3 AAC 50.900(c)).

⁵Order R-09-1(3), Appendix A at 1 (3 AAC 50.910(a)(2)).

⁶Appendix at 1 (3 AAC 50.910(a)(2)).

1 interconnection standards.⁷ The Department of Law revised this section to provide that
2 “[u]ntil the commission adopts by regulation safety, power quality, and interconnection
3 requirements for eligible consumer generation systems, the electric utility shall provide
4 in its tariff for the requirements necessary to protect public safety and system
5 reliability.”⁸

6 Refusal to Interconnect Based on System Capacity Limits

7 Under the net metering regulations, utilities are allowed to deny
8 interconnection to net metering customers based on a predefined system limit.⁹ We
9 required the utility to notify us when it refused to interconnect with a potential net
10 metering customer based on the system limit, but we did not state a time period for the
11 utility to provide the required notification.¹⁰ The Department of Law revised this section
12 to establish a deadline of 30 days for the utility to notify us of its refusal to interconnect
13 with a potential net metering customer.¹¹

14 Additional Metering Equipment

15 As initially adopted, the net metering regulations allowed a utility to install
16 additional metering equipment for net metering customers.¹² The Department of Law
17 modified this provision by adding the qualifying phrase “if the electric utility’s tariff
18 contains a requirement to install the equipment.” We revised the Department of Law
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21 ⁷Order R-09-1(3), Appendix A at 3 (3 AAC 50.940).

22 ⁸Appendix at 4 (3 AAC 50.940).

23 ⁹Specifically, net metering is not required when the total nameplate capacity of
24 net metering customers exceeded 1.5 percent of the utility’s average retail demand.

25 ¹⁰Order R-09-1(3), Appendix A at 1-2 (3 AAC 50.910(b)).

26 ¹¹Appendix at 2 (3 AAC 50.910(b))

¹²Order R-09-1(3), Appendix A at 2 (3 AAC 50.910(g)).

1 language at the April 13, 2010, public meeting to state a utility may install additional
2 metering “if the electric utility’s tariff allows the electric utility to install the equipment.”¹³

3 Eligible Customer Generation System

4 As initially adopted, qualifications for an “eligible customer generation
5 system” included a requirement that the generation system be “located on, or adjacent
6 to, the consumer premises.”¹⁴ The Department of Law removed the phrase “or adjacent
7 to,” requiring that generation systems be located on the consumer premises.¹⁵

8 Definitions

9 *Eligible Customer Generation System*

10 As initially adopted, we defined “eligible facility” by the sources of
11 generation and included this provision in our definitional section. Our definition of
12 “eligible facility” included a provision that provided us with the discretion to allow
13 additional sources of generation.¹⁶ The Department of Law moved provisions regarding
14 eligible facility generation sources to the section addressing substantive requirements
15 for eligible generation systems,¹⁷ explaining that a substantive right provided to this
16 agency cannot be stated in a definitional section.¹⁸

17 *Biomass Energy*

18 Finally, the Department of Law modified the definition of biomass energy
19 to include landfill gas, biogas, wastewater, anaerobic digesters, or municipal solid
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22 ¹³Appendix at 2 (3 AAC 50.910(g)).

23 ¹⁴Order R-09-1(3), Appendix A at 2 (3 AAC 50.920(2)(B)).

24 ¹⁵Appendix at 3 (3 AAC 50.920(2)(B))

25 ¹⁶Order R-09-1(3), Appendix A at 4 (3 AAC 50.949(9)(I)).

26 ¹⁷Appendix at 2 (3 AAC 50.920(1)).

¹⁸April 13, 2010, public meeting transcripts at 8

1 waste.¹⁹ All of these sources of energy were included in the language originally
2 adopted by the commission, but were consolidated by the Department of Law under
3 biomass energy.²⁰

4 Conclusion

5 We believe the Department of Law's modifications to be reasonable and
6 within the scope of our public notice. With the exception of the revision discussed
7 previously under *Additional Metering Equipment*, the final regulations attached as an
8 appendix to this order incorporate all edits proposed by the Department of Law. We
9 adopt the regulations.

10 ORDER

11 THE COMMISSION FURTHER ORDERS that the proposed regulations set out in the
12 appendix to this order are adopted.

13 DATED AND EFFECTIVE at Anchorage, Alaska, this 26th day of April, 2010.

14 BY DIRECTION OF THE COMMISSION

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25 ¹⁹Appendix at 3 (3 AAC 50.920(1)(C)).

26 ²⁰Order R-09-1(3), Appendix A at 4 (3 AAC 50.949(9)(C), (H)).

3 AAC 50 is amended by adding new sections to read:

Article 3. Net Metering Standards.

Section

- 900. Applicability and waiver
- 910. Net metering of electric energy
- 920. Eligible consumer generation systems
- 930. Charges or credits for net electric energy
- 940. Interconnection of eligible consumer generation systems
- 949. Definitions

3 AAC 50.900. Applicability and waiver. (a) Except as provided in (b) of this section, the net metering requirements set out in 3 AAC 50.900 – 3 AAC 50.949 apply to an electric utility that is subject to economic regulation.

(b) The net metering requirements set out in 3 AAC 50.900 – 3 AAC 50.949 do not apply to

(1) an independent electric system owned and operated by an electric utility that is subject to economic regulation if, except for fossil fuel generation for standby and emergency power, 100 percent of the independent electric system's power is supplied by a facility that produces electric energy derived from one or more of the sources listed in 3 AAC 50.920(1)(A) - (H);

(2) an independent electric system owned and operated by an electric utility that is subject to economic regulation, if the independent electric system had total retail sales of less than 5,000,000 kilowatt-hours during the previous calendar year; or

(3) 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.

(c) A requirement in 3 AAC 50.900 - 3 AAC 50.949, other than one also required by a provision of AS 42.05, may be modified or waived, in whole or in part, by order of the commission upon application and a showing of good cause or on the commission's own motion. Application for waiver must be in writing and set out the pertinent facts in sufficient detail to support a finding by the commission that no legitimate public interest will be served by enforcing the requirement designated in the application. A requirement in 3 AAC 50.900 - 3 AAC 50.949 that is also required by a provision of AS 42.05 may be modified or waived, in whole or in part, by order of the commission upon application in writing and a showing that the modification or waiver is in the public interest. (Eff. ___/___/___, Register ___)

Authority: AS 42.05.141 AS 42.05.291 AS 42.05.711
AS 42.05.151 AS 42.05.691

3 AAC 50.910. Net metering of electric energy. (a) Except as provided in (b) of this section, an electric utility shall

(1) make a net metering program available to each of its retail consumers; and
(2) allow consumer generation systems eligible under 3 AAC 50.920 to be interconnected to the electric utility's facilities in accordance with interconnection standards contained in the electric utility's tariff.

(b) An electric utility may refuse to interconnect with a consumer requesting net metering, if interconnection would cause the total nameplate capacity of all eligible consumer generation systems participating in the net metering program to exceed 1.5 percent of the electric utility's average retail demand stated in the electric utility's tariff as required in (d) of this section. The electric utility shall notify the commission no later than 30 days after refusal if the electric utility refuses, for the reason set out in this subsection, to interconnect with a consumer requesting net metering.

(c) An electric utility that has a decrease in average retail demand that results in the total nameplate capacity of eligible consumer generation systems exceeding 1.5 percent of average retail demand shall allow existing net metering consumers to continue participating in the net metering program.

(d) On or before March 1 of each year, an electric utility shall file a tariff advice letter with accompanying tariff sheet stating the number of kilowatts equivalent to 1.5 percent of the electric utility's average retail demand for the previous calendar year and the total nameplate capacity of eligible consumer generation systems participating in the net metering program at the time of filing.

(e) An electric utility may request, by tariff advice letter, to use a limit on total nameplate capacity of eligible consumer generation systems participating in the net metering program above 1.5 percent of the electric utility's average retail demand.

(f) An electric utility may deny participation in a net metering program to a consumer that

(1) participates in another program that allows the consumer to collect, through voluntary contributions from other participating customers of the electric utility, more than the non-firm power rate per kilowatt-hour for the sale of electric energy; or

(2) sells electric energy under an existing contract that allows the consumer to collect more than the non-firm power rate per kilowatt-hour for the sale of electric energy.

(g) An electric utility may install additional metering equipment for net metering consumers, if the electric utility's tariff allows the electric utility to install the equipment. The electric utility

(1) is responsible for all costs related to the purchase, installation, and maintenance of the additional metering equipment; and

(2) may not assess a recurring charge for the additional metering equipment.
(Eff. ___/___/___, Register ___)

Authority: AS 42.05.141 AS 42.05.291 AS 42.05.321
AS 42.05.151 AS 42.05.311

3 AAC 50.920. Eligible consumer generation systems. To be eligible for interconnection under a net metering program, a consumer generation system must

(1) be a facility that produces electric energy derived from one or more of the

following sources:

- (A) solar photovoltaic and solar thermal energy;
 - (B) wind energy;
 - (C) biomass energy, including landfill gas or biogas produced from organic matter, wastewater, anaerobic digesters, or municipal solid waste;
 - (D) hydroelectric energy;
 - (E) geothermal energy;
 - (F) hydrokinetic energy;
 - (G) ocean thermal energy;
 - (H) other sources as approved by the commission that generally have similar environmental impact;
- (2) be operated and either owned or leased by the consumer, and
- (A) have a total nameplate capacity of no more than 25 kilowatts per consumer premises;
 - (B) be located on the consumer premises;
 - (C) be used primarily to offset part or all of the consumer's requirements for electric energy; and
 - (D) include an inverter;
- (3) include an electric generator and its accompanying equipment package;

and

(4) be physically interconnected to the consumer's side of the meter from which the electric utility provides electric service to the consumer. (Eff. ___/___/___, Register ___)

Authority: AS 42.05.141 AS 42.05.291 AS 42.05.321
AS 42.05.151 AS 42.05.311

3 AAC 50.930. Charges or credits for net electric energy. (a) An electric utility with a consumer participating in a net metering program shall measure the net electric energy during each monthly billing period, and

(1) if the electric utility supplied more electric energy to the consumer than the consumer supplied to the electric utility during the monthly billing period, the electric utility shall bill the consumer for the number of kilowatt-hours of net electric energy supplied by the electric utility to the consumer at the applicable rates contained in the electric utility's currently effective tariff; or

(2) if the consumer supplied more electric energy to the electric utility than the electric utility supplied to the consumer during the monthly billing period, the electric utility shall credit the consumer's account with an amount derived by multiplying the kilowatt-hours of net electric energy supplied by the consumer to the electric utility by the non-firm power rate contained in the electric utility's currently effective tariff, unless a different non-firm power rate has been established in a commission-approved contract.

(b) Dollar amounts credited to the account of a net metering consumer for furnishing electric energy to the electric utility under (a)(2) of this section

(1) shall be used to reduce dollar amounts owed by the consumer in

subsequent monthly billing periods; and

(2) do not expire or otherwise revert to the electric utility.

(c) Except as otherwise provided in (a) and (b) of this section regarding per-kilowatt hour charges, the electric utility may bill a net metering consumer for all applicable charges authorized by the electric utility's approved tariff.

(d) An electric utility administering a net metering program may not charge a consumer participating in the net metering program any additional fee for standby, capacity, interconnection, or other net metering expense unless approved by the commission.

(e) An electric utility may petition the commission to change electric rate designs, consistent with 3 AAC 48.500 - 3 AAC 48.560, to include appropriate rate classes for net metering consumers, if the utility can demonstrate an adverse material rate impact on utility consumers that do not participate in the net metering program. (Eff. ___/___/___, Register ___)

Authority: AS 42.05.141 AS 42.05.291 AS 42.05.411
AS 42.05.151 AS 42.05.391 AS 42.05.431

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. (Eff. ___/___/___, 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. Definitions. In 3 AAC 50.900 - 3 AAC 50.949, unless the context requires otherwise,

(1) "average retail demand" means the number expressed in kilowatts and determined by dividing the total retail sales of the electric utility, measured in kilowatt-hours, for a calendar year with

(A) 365 days, by 8,760 hours;

(B) 366 days, by 8,784 hours;

(2) "biomass energy"

(A) means energy derived from

(i) plant matter, including trees, grasses, and agricultural crops; or

(ii) animal matter, including fish;

(B) does not include energy derived from fossil fuels;

(3) "consumer" means a customer

(A) of an electric utility that is subject to economic regulation;

(B) who consumes the electricity purchased from the electric utility;

(4) "consumer-generated electric energy" means electric energy that is generated by a consumer eligible for participation in a net metering program;

(5) "consumer premises" means all buildings and associated grounds owned

by, leased by, rented to, or licensed to a consumer at a single location where an electric utility provides service through one or more utility meters;

(6) "economic regulation" has the meaning given in 3 AAC 48.820;

(7) "electric system" means an integrated electrical system that includes at least generation and distribution;

(8) "eligible consumer generation system" means a system that complies with 3 AAC 50.920;

(9) "equipment package" means a group of components connecting an electric generator to an electric utility's electric distribution system; "equipment package" includes all interface equipment and the interface equipment's controls, switchgear, inverter, and other interface devices;

(10) "excess consumer-generated electric energy" means the amount of consumer-generated electric energy in excess of the consumer's consumption from the eligible consumer generation system during a monthly billing period, as measured at the electric utility's meter;

(11) "geothermal energy" means energy generated from heat stored in the earth, or the collection of absorbed heat derived from underground;

(12) "hydroelectric energy" means energy generated from falling or flowing water;

(13) "hydrokinetic energy" means energy generated from waves or directly from the flow of water in ocean currents, tides, or inland waterways;

(14) "independent electric system" means an electric system that is not interconnected with any other electric system;

(15) "inverter" means a device that converts direct-current power into alternating-current power so that the generated power is compatible with power generated by an electric utility;

(16) "nameplate capacity" means the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer;

(17) "net electric energy" means, as metered by the electric utility for a specified period and expressed in kilowatt-hours,

(A) the amount by which the quantity of electric energy supplied by the electric utility to the consumer exceeds the quantity of electric energy supplied by the consumer to the electric utility; or

(B) the amount by which the quantity of electric energy supplied by the consumer to the electric utility exceeds the quantity of electric energy supplied by the electric utility to the consumer;

(18) "net metering" means measuring the amount of net electric energy as described in 3 AAC 50.930(a) for the applicable billing period;

(19) "net metering program" means a program administered by an electric utility that allows a consumer operating and either owning or leasing an eligible consumer generation system to

(A) generate electric energy primarily for the consumer's own use;

(B) supply consumer-generated electric energy to the electric utility; and

(C) receive a credit under 3 AAC 50.930 if net metering results in excess consumer-generated electric energy during a billing period;

(20) "non-firm power rate" means the rate updated quarterly in an electric utility's tariff in accordance with 3 AAC 50.770(d), or established in a commission-approved contract as described in 3 AAC 50.930(a)(2);

(21) "ocean thermal energy" means the conversion of energy arising from the temperature difference between warm surface water of oceans and cold deep-ocean current into electrical energy or other useful forms of energy;

(22) "retail sales" means sales of electricity to the end-use consumer, exclusive of wholesale sales;

(23) "solar photovoltaic energy" means the conversion of sunlight into electricity through a photovoltaic cell;

(24) "solar thermal energy" means a technology for harnessing solar energy for thermal energy;

(25) "switchgear" means the combination of electrical disconnects, fuses, or circuit breakers used to

(A) isolate electrical equipment; and

(B) de-energize equipment to allow work to be performed. (Eff.

___/___/___, Register ___)

Authority: AS 42.05.141 AS 42.05.151