

**HB**

**37**

<TARGET><BILL>HB 37</BILL><SUBJECT>HB  
37</SUBJECT><COMM>HENE27</COMM></TARGET>

# ALASKA STATE LEGISLATURE

## REPRESENTATIVE KURT OLSON

- Chair: Labor and Commerce
- Vice Chair: Rules, Administrative Regulation Review  
Economic Development Trade & Tourism
- Member: Energy, Legislative Budget & Audit

Session: January - April  
State Capitol, Room 24  
Juneau, AK 99801-1182  
Phone: 907-465-2693  
Fax: 907-465-3835



Interim: May - December  
145 Main Street Loop, Ste 221  
Kenai, AK 99611  
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Official Business

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### **Sponsor Statement** **HB 37 - Net Metering**

With our windy coasts, untapped rivers, and huge tidal resources, Alaska has the potential to be a national leader in the development of renewable energy sources. Though the state already produces 25% of its energy from renewable sources, we can do more to promote the use of these resources to meet Alaska's energy needs. House Bill 37 is an opportunity to do just that. This legislation promotes the private investment in renewable energy systems by giving Alaskans the option of net metering.

Net metering allows grid-tied customers who generate electricity from renewable resources to receive credit from their utility for the excess power they generate beyond what they consume. HB 37 allows customers to apply these credits towards the following billing period or to sell unused credits back to the retailer. This legislation thus provides a simple arrangement that allows customers to use the excess electricity they generate to offset electricity used at other times during the billing period.

Not only does this legislation encourage Alaskans to take ownership of their own energy generation, it is an inexpensive way for the state to promote the use of renewable energy systems. Alaska is rich with renewable energy sources, and giving consumers a financial incentive to tap into them benefits both the state and the environment.

Forty states currently provide a net metering option to consumers. Though these requirements are often enacted by state utility regulators, state lawmakers may step in to enact net metering laws through legislative action. The legislatures of Washington, Oregon, and California have addressed net metering in this fashion, and I urge this body to follow their lead

House Bill 37 is a chance to encourage Alaskans to take advantage of our renewable energy resources and an opportunity that should not be missed. I respectfully ask for your consideration of this bill and look forward to hearing your questions and concerns.

27-LS0214A  
Last Modified 2/9/11  
Jennifer Senette

# ALASKA STATE LEGISLATURE

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- Member: Rules, Resources

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### Sectional Summary HB 37 – Net Metering

The following is a sectional summary of HB 37 and is not an authoritative representation of the bill. For an authoritative interpretation, please refer to the bill itself.

**Section 1: amends AS 42.05 by adding a new section to read:**

**Section 42.05.686. Net metering of electrical energy**

Subsections (a) and (b) address the applicability of the net metering requirement and the possibility of waiving requirements upon application

Subsection (c) allows the commission to adopt by regulation additional requirements for consumer generation systems participating in the net metering program

Subsection (d) makes an exception for certain systems of an electric utility

Subsections (e)-(h) relate to the net metering of electricity, including setting an overall capacity limitation on net metering

Subsection (i) allows an electric utility to request an increase in the limit on total capacity of eligible consumer generation systems participating in the net metering program

Subsection (j) describes circumstances in which an electric utility may deny participation in a net metering program

Subsection (k) allows an electric utility to install additional metering equipment for net metering consumers

Subsection (l) specifies eligibility criteria for consumer generation facilities, including a generation capacity limit of 25 kilowatts

Subsections (m)-(p) address charges or credits for net electricity

Subsection (q) defines the terms used in this bill

**Section 2:** provides for an effective date

# FISCAL NOTE

**STATE OF ALASKA**  
**2011 LEGISLATIVE SESSION**

Fiscal Note Number \_\_\_\_\_  
 Bill Version HB 37  
 () Publish Date \_\_\_\_\_

Identifier (file name) HB037-CCED-RCA-03-11-11 Dept. Affected DCCED  
 Title Net Energy Metering Appropriation Regulatory Commission of Alaska  
 Allocation Regulatory Commission of Alaska  
 Sponsor Representative Kurt Olson  
 Requester House Energy OMB Component Number 2417

**Expenditures/Revenues** (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	Appropriation Required	Information					
	FY 2012	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants							
Miscellaneous							
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>							
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<b>CHANGE IN REVENUES</b>							
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**FUND SOURCE** (Thousands of Dollars)

1002 Federal Receipts							
1003 GF Match							
1004 GF							
1005 GF/Program Receipts							
1037 GF/Mental Health							
Other (please identify)							
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2011) cost \_\_\_\_\_

**POSITIONS**

Full-time							
Part-time							
Temporary							

**Why this fiscal note differs from previous version (if initial version, please note as such)**

This is the initial fiscal note to HB 37 from the Regulatory Commission of Alaska.

Prepared by Robert M. Pickett, Chairman  
 Division Regulatory Commission of Alaska  
 Approved by Susan K. Bell, Commissioner  
Commerce, Community, and Economic Development

Phone 276-6222  
 Date/Time 3/11/11 3:15 PM  
 Date 3/11/2011

FISCAL NOTE

STATE OF ALASKA  
2011 LEGISLATIVE SESSION

BILL NO. HB 37

**Analysis**

This legislation mandates that net metering services be provided by certain economically regulated utilities, establishes conditions for interconnection and net metering, exempts certain systems of an electric utility, and allows the Regulatory Commission of Alaska (RCA) to modify or waive a requirement in whole or in part.

This legislation would require that certain factors be recognized or considered when the RCA reviews net metering issues. The RCA expects to implement the provisions of this legislation with existing resources.

TESTIMONY OF MARILYN LELAND,  
EXECUTIVE DIRECTOR, ALASKA POWER ASSOCIATION

**Before the House Special Committee on Energy**

March 15, 2011

House Bill 37, Relating to Net Metering of Electric Energy

Thank you for the opportunity to comment on House Bill 25. My name is Marilyn Leland and I am the Executive Director of the Alaska Power Association. APA is the statewide trade association that represents the electric utilities that supply power to about more than a half million Alaskans from Barrow to Southwestern Alaska, through the Interior and Southcentral and down the Inside Passage.

In the way of background, I'd first like to give you a little history of how we got to where we are today. In 2006-2008, net metering was being considered by the Regulatory Commission of Alaska in its docket on the adoption of regulations to implement amendments to the Public Utility Regulatory Policies Act of 1978 by the Energy Policy Act of 2005. In that docket, the Commission was required to make a decision as to whether it would adopt the federal standard for Alaska for net metering. The Commission decided that it would not adopt the federal standard, but opened a docket to determine whether it would require net metering standards specific for Alaska.

The docket was opened in January 2009 and several workshops were held for interested parties to work on proposed regulations. Because this docket was already open and under consideration during the last legislative session, APA recommended that the legislature not take action on any of the net metering bills that were before it. No further action was taken by the legislature last session on any of the bills and the RCA process was a success. There was exceptionally good participation in the workshops, with more public participation than the RCA had experienced in any of its dockets. In the workshops, Commission staff, utility representatives and a variety of public participants worked through proposed regulations and came to agreement that all who participated could live with. I would like to commend the RCA for the process it used in this docket.

The Commission issued an Order Adopting Regulations on January 15, 2010. However – and this is very important – the agency has not yet completed work on its net metering regulations. The RCA is considering further revisions to the currently effective net metering regulations, to address interconnection requirements for net metered generation. As presently proposed, the new requirements will be added as a section within the current net metering regulations. An RCA order in R-09-2 is expected by May 5, but it can take months for Department of Law review and certifications before regulations are finalized and placed into effect. APA and its members support the intent of the sponsor of HB37.

However, we believe that codification is at the least premature, and we urge that no action be taken at this time.

In fact, we believe that putting the RCA's net metering regulations in statute is not necessary. The RCA has addressed the issue well and is the best suited to address any needed changes in the future. Codifying the current regulations will limit the RCA's ability to implement any needed changes in the future and could well lead to unintended consequences by not allowing the RCA to make future changes using its public docket process. Current net metering requirements, and any future changes, involve careful balancing of issues of utility ratemaking, utility system operations, consumer input and policy. APA understands the good intention that codifying net metering regulations guards against precipitous future changes, but based on the RCA's open and thoughtful rulemaking process employed thus far, APA is comfortable leaving net metering in the regulatory arena. As I said, APA understands there are good arguments for the statutory as well as the regulatory approach, but favors the regulatory approach at this point in time.

The RCA is empowered and tasked by statute, and has the technical expertise and experience, to conduct the research and the balancing of interests necessary to address net metering. In addition, APA believes the RCA's well-established rulemaking process provides the necessary opportunity for public comment, workshops, and analysis. Also important to note is that some state legislatures have enacted net metering statutes because their public utilities commissions were not able or willing to adequately address the issue. That is not the case in Alaska.

The members of APA not opposed to small scale renewable generation, or to purchasing power from such consumer-owned generation. Our members are likewise not opposed to consumers reducing their electric purchases by using their own generation. The issue is making sure that a purchased-power rate is not just fair for the seller of that power, but is equitable to all ratepayers of a utility who must share in any subsidized rate.

APA believes that the Regulatory Commission is best equipped to make those determinations.

Regulatory Commission of Alaska  
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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 ) R-09-1  
of Regulations Implementing Net Metering )  
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.<sup>1</sup> 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.<sup>2</sup>

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

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

1 Discussion

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

7 Waiver Provisions

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

14 Interconnection Standards

15 As initially adopted, the net metering regulations required utilities to  
16 interconnect with net metering customers in accordance with interconnection standards  
17 "approved or accepted by this commission."<sup>5</sup> The Department of Law revised this  
18 section to specify that utilities are required to interconnect with net metering customers  
19 in accordance with interconnection standards "contained in the electric utility's tariff."<sup>6</sup> A  
20 similar revision was made to our section addressing interconnection of net metering  
21 facilities, which previously stated that we may adopt regulations addressing  
22

23 <sup>3</sup>Order R-09-1(3), Appendix A at 1 (3 AAC 50.900(c)).

24 <sup>4</sup>Appendix at 1 (3 AAC 50.900(c)).

25 <sup>5</sup>Order R-09-1(3), Appendix A at 1 (3 AAC 50.910(a)(2)).

26 <sup>6</sup>Appendix at 1 (3 AAC 50.910(a)(2)).

1 interconnection standards.<sup>7</sup> 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.”<sup>8</sup>

#### 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.<sup>9</sup> 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.<sup>10</sup> 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.<sup>11</sup>

#### 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.<sup>12</sup> 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  
19  
20

21 <sup>7</sup>Order R-09-1(3), Appendix A at 3 (3 AAC 50.940).

22 <sup>8</sup>Appendix at 4 (3 AAC 50.940).

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

24 <sup>10</sup>Order R-09-1(3), Appendix A at 1-2 (3 AAC 50.910(b)).

25 <sup>11</sup>Appendix at 2 (3 AAC 50.910(b))

26 <sup>12</sup>Order 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.”<sup>13</sup>

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.”<sup>14</sup> The Department of Law removed the phrase “or adjacent  
7 to,” requiring that generation systems be located on the consumer premises.<sup>15</sup>

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.<sup>16</sup> The Department of Law moved provisions regarding  
14 eligible facility generation sources to the section addressing substantive requirements  
15 for eligible generation systems,<sup>17</sup> explaining that a substantive right provided to this  
16 agency cannot be stated in a definitional section.<sup>18</sup>

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  
20

21  
22 <sup>13</sup>Appendix at 2 (3 AAC 50.910(g)).

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

24 <sup>15</sup>Appendix at 3 (3 AAC 50.920(2)(B))

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

26 <sup>17</sup>Appendix at 2 (3 AAC 50.920(1)).

<sup>18</sup>April 13, 2010, public meeting transcripts at 8

1 waste.<sup>19</sup> 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.<sup>20</sup>

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



24  
25 <sup>19</sup>Appendix at 3 (3 AAC 50.920(1)(C)).

26 <sup>20</sup>Order 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

## Catching wind of alternative energy: Legislature to consider codifying net metering regulations

By Molly Dischner | *Peninsula Clarion*

Friday, March 11, 2011

Story last updated at 3/11/2011 - 12:49 pm

Among the energy considerations in front of the Alaska State Legislature this week is a bill to codify net metering regulations instituted last summer.

Rep. Kurt Olson, R-Soldotna, proposed the bill to formalize rules adopted by the Regulatory Commission of Alaska last year.

"This would formalize it and make it harder to change," Olson said.

Net metering enables Alaskans to connect their own energy systems to a grid and get credited or paid for the energy they produce.

Last year, the commission opened a docket to investigate the matter.

"The bill that I did this year took the results of that docket," he said.

The net metering legislation allows solar, wind, biomass, hydroelectric, hydrokinetic, ocean thermal, biogas and other similar energy sources approved by the commission to be part of a utility's grid, as long as the system is 25 kilowatt hours or smaller. Producers are metered on a monthly basis.

Alaskan Wind Industries' Nadia Daggett said that when they produce 600 kW in a month, they get a credit for 600 kW on their bill. That's a step closer to yearly metering, which Daggett said is more ideal for producers. But it's much better than minute-by-minute metering, she said. That sort of metering reduces the incentive to produce energy because producers rarely use energy precisely when they are producing it, and frequently end up getting paid at a wholesale rate and then turning around and buying their energy at a retail rate a few hours later.

In his sponsor statement, Olson said that 40 states currently have some form of net metering legislation.

Daggett said that the basis of net metering is an old federal law requiring consumers to be able to connect their own energy systems to the grid. What's left up to the states is how to negotiate payment.

Only major utilities --like Homer Electric -- are governed by these rules. The smallest, like Seward, are not.

The legislation specifies that up to 1.5 percent of an area's consumption can be provided via individual producers.

"That's pretty normal," Daggett said.

Most other states have similar regulations when they first codify net metering, she said. Eventually it gets changed.

For Homer Electric Association customers, that's about 119 5 kW systems, Daggett said.

How fast will the Peninsula hit those caps?

"Very, very quickly," Daggett said.

Her company has installed most of the systems that are on the central Peninsula's grid.

"We're about a quarter of the way into our demand and that was only the first year," she said.

So that number might need to be negotiated up, something Daggett said has happened in other states.

Olson's bill has a provision to allow the commission to make changes. It states that the commission can adopt additional regulations that deal with issues related to net metering -- like safety, power quality and connection standards -- to ensure that net metering doesn't pose a hazard for communities.

Individual utilities can also adopt their own regulations with RCA approval, Daggett said.

Molly Dischner can be reached at [molly.dischner@peninsulaclarion.com](mailto:molly.dischner@peninsulaclarion.com).

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STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners:

Robert M. Pickett, Chairman  
Kate Giard  
Paul F. Lisankie  
Anthony A. Price  
Janis W. Wilson

In the Matter of the Consideration of the  
Adoption of Regulations Implementing Net  
Metering

)  
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R-09-1

ORDER NO. 3

ORDER ADOPTING REGULATIONS

BY THE COMMISSION:

Summary

We adopt regulations establishing net metering requirements for certain electric utilities.

Background

After declining to adopt a federal net metering standard,<sup>1</sup> we opened this docket to consider regulations implementing an Alaska-specific net metering standard.

<sup>1</sup>See Order R-06-5(7), dated August 27, 2008 and titled *Order Declining to Adopt Federal Net Metering, Fuel Diversity, and Fossil Fuel Generation Efficiency Standards*.

1 We issued a straw man proposal to generate comment on elements of a net metering  
2 requirement,<sup>2</sup> and held a technical conference to discuss the net metering  
3 requirement.<sup>3</sup> We issued proposed regulations for comment<sup>4</sup> and provided public  
4 notice of our intent to consider net metering regulations.<sup>5</sup>

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<sup>2</sup>See Order R-06-5(8)/R-09-1(1)/R-09-2(1), dated February 6, 2009 and titled  
12 *Order Closing Docket, Opening Dockets, Subsuming Applicable Portions of*  
13 *Docket R-06-5 Record into Dockets R-09-1 and R-09-2, Scheduling Technical*  
*Conferences, and Requiring Filings.*

14 <sup>3</sup>The technical conference was held as scheduled on March 4, 2009.  
15 Organizations represented at the net metering technical conference included Alaska  
16 Center for the Environment (Margaret Adsit), Alaska Power Association (Crystal Enkvist  
17 and Dean Thompson), Alaska Power & Telephone Association (Danny Gonce), Alaska  
18 Village Electric Cooperative (Meera Kohler), Alaskan Wind Industries (Nadia Daggett),  
19 Chilkoot Indian Association (Scott Hansen), Chugach Electric Association, Inc. (Don  
20 Edwards and Rick Freymiller), Golden Valley Electric Association (Kirk Gibson, Ethan  
21 Falatko, and Mike Wright), Homer Electric Association (Jim Patras and Rick Eckert),  
22 Interstate Renewable Energy Council (Jason Keyes), Matanuska Electric Association  
23 (Jim Walker), MEA Ratepayers Alliance (Tim Leach), the Municipality of Anchorage  
24 d/b/a Municipal Light & Power (Robert Reagan), the National Wildlife Foundation (Pat  
25 Lavin), the Regulatory Affairs and Public Advocacy Section of the Alaska Attorney  
26 General's Office (Sam Cason and Janet Fairchild), Rural Energy Enterprises (Lonnie  
Jackson), Sitka Global Warming Group (Michelle Putz), TDX Power (Jennifer Owens),  
and Your Clean Energy LLC (Andy Baker). Individuals appearing on their own behalf  
were David Mogar, Will Schlein, Jim Stimpfle, and Jeff Turner (Chief of Staff for  
Representative Charisse Millet).

<sup>4</sup>See Order R-09-1(2), dated June 12, 2009 and titled *Order Issuing Proposed  
Regulations for Comment.*

<sup>5</sup>See *Notice of Proposed Changes in the Regulations of the Regulatory  
Commission of Alaska*, dated June 12, 2009.

1 We reviewed over 45 comments during the public comment period, which included an  
2 opportunity for initial and reply comments.<sup>6</sup>

3 Commission Staff presented a comment summary and suggested several  
4 revisions to the proposed regulations based on public comment. After reviewing the  
5 public comments and agreeing on revisions to the proposed regulations at our  
6 October 14, 2009 public meeting, we voted to adopt the net metering regulations that  
7 are attached to this order as Appendix A.<sup>7</sup>

#### 8 Discussion

9 Net metering allows a consumer to reduce his or her load requirement by  
10 interconnecting on-site generation facilities to electric utility facilities. The amount of  
11 customer-generated power is compared to the customer's electric consumption for the  
12 applicable billing period, with the customer either billed for net electric consumption or  
13 credited for generating more electricity than used in a billing period.

14 We adopted a net metering requirement that will apply to certain Alaskan  
15 electric utilities. While the parameters of our net metering requirement vary from  
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18 <sup>6</sup>Initial comments were filed by Representative Alan Austerman, Alaska Center  
19 for the Environment, Alaska Power Association, Ole Anderson, Melissa Aronson,  
20 Christopher Brewton, Robert Burns, Chugach Electric Association, Nina Faust and  
21 Edgar Bailey, Dr. Frederick Foster, Jeff Friedman, Golden Valley Electric Association,  
22 Matt Gray, Dianne Holmes, Frank L. Holmes, Homer Electric Members Forum,  
23 Interstate Renewable Energy Council, Pat Irwin, Tim June, Philip Kaluza, Sherry  
24 Kimmons, Kootznoowoo Incorporated, James Lawrence, J.T. Lindholm, Bill Lynch,  
25 Peter McKay, Mark Masteller, Duff Mitchell, Deborah Nakada, the National Wildlife  
26 Federation, Representative Paul Seaton, Peter Schneider, Rebecca Shaffer, Phil St.  
John, Michael J. Van Note, Paulette Wellington, Lawrence Whiting, Michelle Wilber,  
Yukon River Inter-Tribal Watershed Council, and Bryan Zak. Reply comments were  
filed by Alaska Power Association, Chugach Electric Association, the National Wildlife  
Federation, and the Municipality of Anchorage d/b/a Municipal Light and Power.

<sup>7</sup>October 14, 2009 public meeting transcripts at 173-175.

1 pending net metering legislation,<sup>8</sup> we believe that our net metering regulations reflect an  
2 appropriate compromise that facilitates net metering in Alaska and adequately protects  
3 the interests of utilities, net metering consumers, and utility customers that do not net  
4 meter. We create a new Article in Chapter 50 (*Energy Conservation*) to incorporate net  
5 metering requirements (3 AAC 50.900 – 3 AAC 50.949). The elements of our proposed  
6 net metering regulations are discussed below.

7 3 AAC 50.900. Applicability and Waiver

8 This section addresses the applicability of our net metering requirement by  
9 identifying categories of electric utilities subject to the net metering requirement.<sup>9</sup>  
10 Generally speaking, the net metering requirement applies to all electric utilities subject  
11 to economic regulation by this agency. However, the requirement does not apply to an  
12 economically regulated electric utility (1) with 100 percent of its electrical power supplied  
13 by an eligible facility, as defined in 3 AAC 50.949,<sup>10</sup> or (2) for independent systems that  
14 have retail sales of less than 5,000,000 kilowatt hours during the utility's previous fiscal  
15 year.<sup>11</sup> In addition, an electric utility demonstrating that limiting net metering

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17 <sup>8</sup>The 26th Alaska State Legislature has three pending legislative bills that would  
18 require retailer suppliers of electricity to provide net metering - House Bill 31, House Bill  
19 66, and Senate Bill 131.

20 <sup>9</sup>Appendix B to this Order lists the utilities subject to the net metering  
21 requirement.

22 <sup>10</sup>Specifically, "eligible facility" means a facility that produces electric energy  
23 derived from solar photovoltaic and solar thermal energy; wind energy; biomass energy;  
24 hydroelectric energy; geothermal energy; hydrokinetic energy; ocean thermal energy;  
25 landfill gas or biogas produced from organic matter, wastewater, anaerobic digesters, or  
26 municipal solid waste; and other sources as approved by us that generally have similar  
environmental impact. See 3 AAC 50.949(9).

<sup>11</sup>For example, Alaska Power Company provides service to 21 different  
communities, each having a separate electrical system. Only five of the separate  
electric systems sold more than 5,000,000 kilowatt during the 2007 fiscal year. These  
five systems would be the only portions of Alaska Power Company required to  
participate in the net metering program.

1 installations is reasonably necessary to address system stability constraints or other  
2 operational issues is not required to provide net metering over the affected portion of its  
3 distribution system. This section also allows us to waive any requirement in  
4 3 AAC 50.900 – 3 AAC 50.949 upon application and for good cause shown.

5 3 AAC 50.910. Net Metering of Electricity

6 Subsection (a) requires covered electric utilities to make net metering  
7 available to its customers, and allows the interconnection of customer generation  
8 systems to the electric utility's facilities. Subsection (b) states an overall capacity  
9 limitation on net metering, allowing an electric utility to refuse net metering service if the  
10 overall nameplate capacity of all net metering systems interconnected with the utility  
11 exceeds a pre-defined cap (1.5 percent of the electric utility's average retail demand).  
12 Subsection (c) precludes a utility from disconnecting existing net metering customers  
13 should the cumulative nameplate capacity of net metering systems interconnected to  
14 the utility's distribution system exceed the cap as a result of a decrease in average  
15 demand. Subsection (d) requires an electric utility to annually publish in its tariff the  
16 number of kilowatt hours equivalent to 1.5 percent of the electric utility's average retail  
17 demand.

18 3 AAC 50.920. Consumer Generation System

19 This section specifies eligibility criteria for consumer generation facilities,  
20 including a generation capacity limit of 25 kilowatts.

21 3 AAC 50.930. Charges or Credits for Net Electricity

22 Subsection (a) requires an electric utility to measure a net metering  
23 consumer's energy consumption and generation, with net metering consumers being  
24 billed for net consumption and receiving bill credits when the customer's generation  
25 exceeds usage. Subsection (b) addresses the application of bill credits as dollar  
26 amounts to subsequent monthly billing periods. Subsection (c) allows an electric utility

1 to charge a net metering consumer for non-generation related consumer charges  
2 provided those charges are authorized by the electric utility's tariff. Subsection (d)  
3 precludes an electric utility from charging a net metering consumer additional fees for  
4 net metering service unless we approve the charge. Subsection (e) states an electric  
5 utility may request a change to its rate design to incorporate a net metering customer  
6 class. It requires the electric utility to demonstrate an adverse material rate impact on  
7 non-net metering customers to justify a net metering customer class.

8 3 AAC 50.940, Interconnection of Customer Generation Facilities

9 This section allows us to establish interconnection requirements for  
10 customer generation systems.

11 3 AAC 50.950, Definitions

12 This section defines terms used in the net metering regulations, including  
13 a definition specifying eligible sources of electricity for net metering purposes.<sup>12</sup>

14 **ORDER**

15 THE COMMISSION FURTHER ORDERS that the regulations set out in Appendix A to  
16 this order are adopted.

17 DATED AND EFFECTIVE at Anchorage, Alaska, this 15th day of January, 2010.

18 BY DIRECTION OF THE COMMISSION  
19 (Commissioner Anthony A. Price, dissenting.)



26 <sup>12</sup>See footnote 10.

## Utilities Required to Allow Net Metering\*

2nd  
exception  
→

Utility	Community	Retail Sales (kWh)	PCE Eligible	Source
Alaska Power Company	Craig	9,718,808	Yes	FY 2007 PCE Report
	Haines	12,091,366	Yes	FY 2007 PCE Report
	Klawock	8,833,579	Yes	FY 2007 PCE Report
	Skagway	12,072,805	Yes	FY 2007 PCE Report
	Tok	10,340,324	Yes	FY 2007 PCE Report
Bethel Utilities Corporation	Bethel	39,103,836	Yes	FY 2007 PCE Report
Inside Passage Electric Cooperative	Hoonah	5,011,912	Yes	FY 2007 PCE Report
TDX North Slope Generating	Deadhorse	41,721,461	No	FY 2008 Annual Report Data
Alaska Electric Light & Power	Juneau	346,840,000	No	FY 2008 Annual Report Data
Homer Electric Association	Kenai Peninsula	523,330,000	No	FY 2008 Annual Report Data
Matanuska Electric Association	Mat-Su Valley	700,924,000	No	FY 2008 Annual Report Data
Municipal Light & Power	Anchorage	1,118,751,652	No	FY 2008 Annual Report Data
Chugach Electric Association	Anchorage, Eagle River, Girdwood	1,205,832,000	No	FY 2008 Annual Report Data
Golden Valley Electric Association	Fairbanks, North Pole	1,349,251,000	No	FY 2008 Annual Report Data

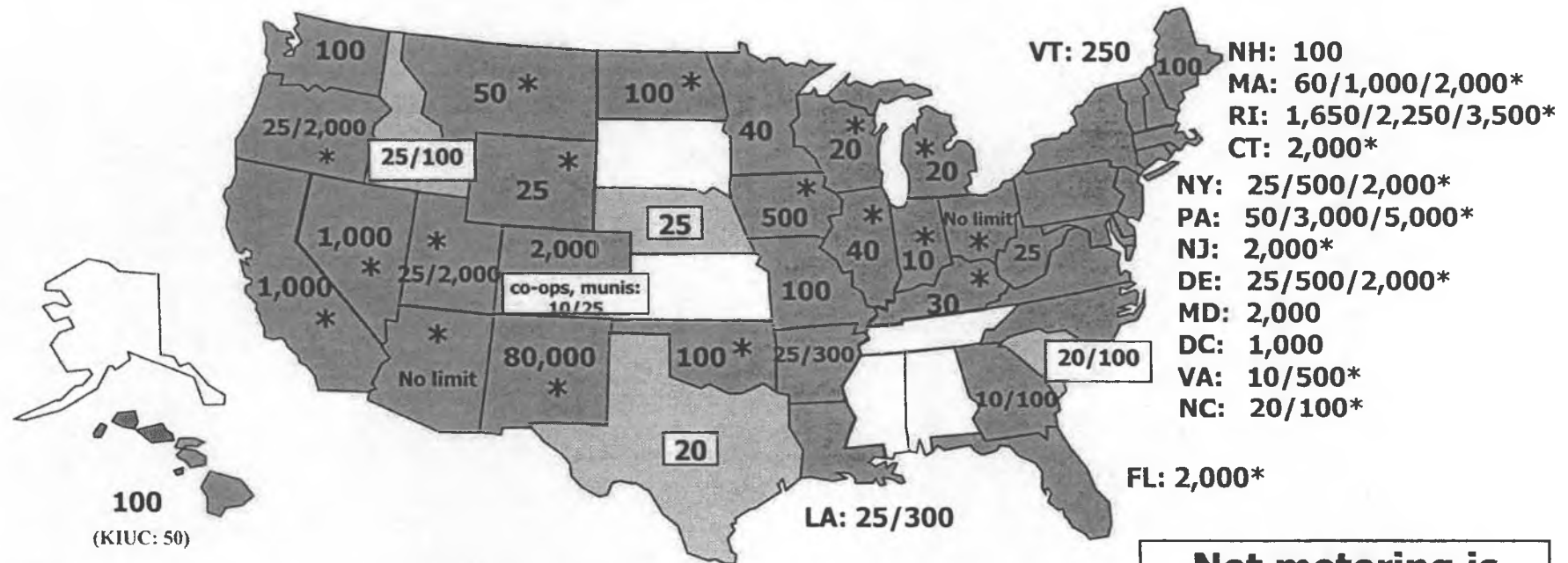
*Note: The above utilities would be subject to net metering requirements based on total annual retail sales (see 3 AAC 50.900(a), (b)(2)). However, the above utilities may apply for a partial exemption for a portion of its system based on a demonstration that limiting net metering installations is necessary to address system stability constraints or other operational issues (3 AAC 50.910(b)(3)). In addition, any utility (including those listed above) that provides 100 percent of its power (excluding backup and emergency power) from an eligible facilities is exempt from net metering requirements (3 AAC 50.910(b)(3)). Generally speaking, an "eligible facility" means a facility that produces electricity from a renewable energy source (see 3 AAC 50.949(9)).*



DSIRE: [www.dsireusa.org](http://www.dsireusa.org)

February 2009

# Net Metering



**Net metering is available in 44 states + D.C.**

- State-wide net metering for all utility types
- \* State-wide net metering for certain utility types only (e.g., investor-owned utilities)
- Net metering offered voluntarily by one or more individual utilities

Note: Numbers indicate individual system size limit in kilowatts (kW). Some states' limits vary by customer type, technology and/or system application; this is the case when multiple numbers appear for one state. Other limits may also apply. For complete details, see [www.dsireusa.org](http://www.dsireusa.org).

# HP LaserJet P4010 and P4510 Series Printers



Clear Jams  
清除卡紙  
Elakadások elhárítása  
Устранение замятий

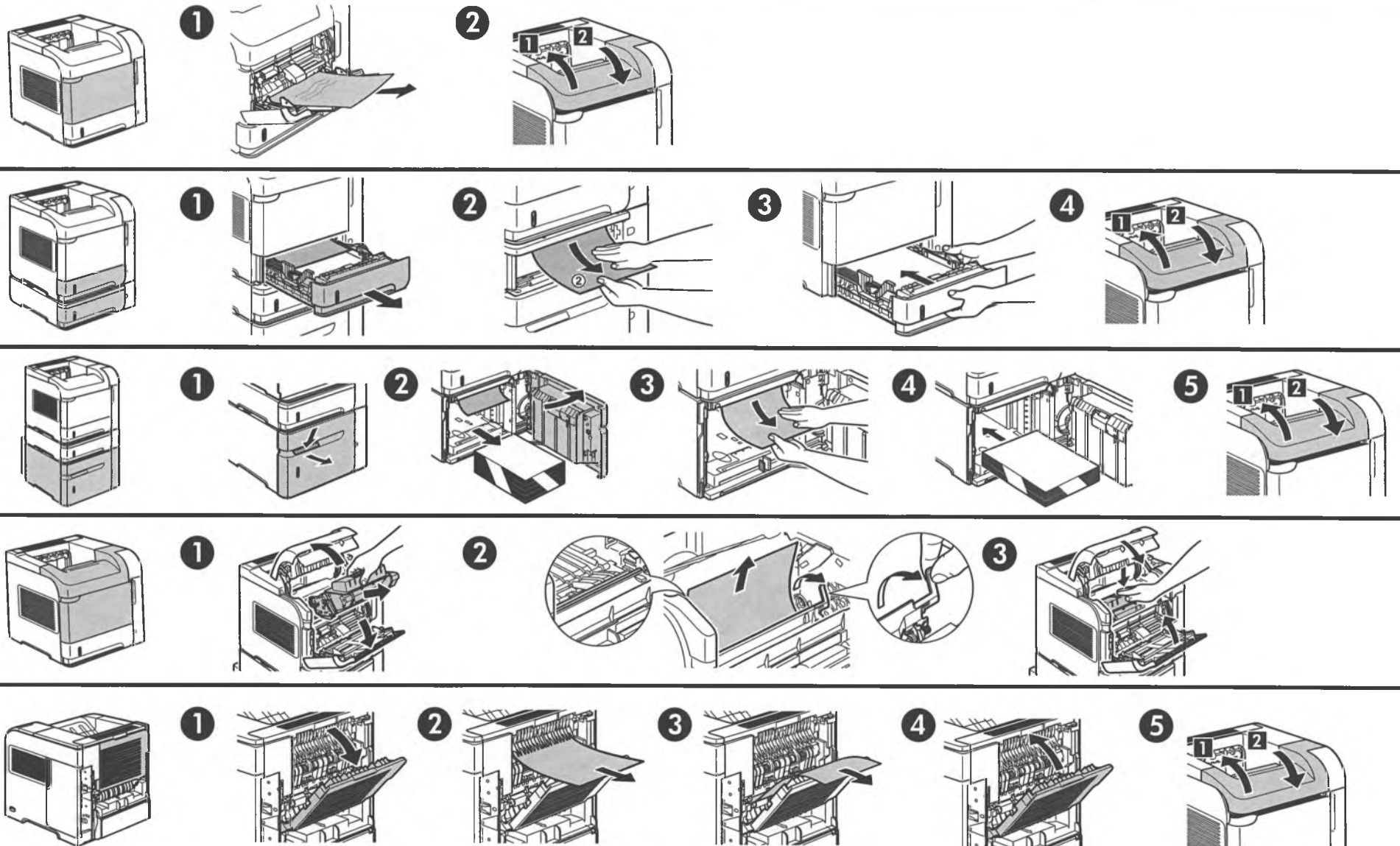
Eliminer les bourrages  
Odstranění uvíznutých médií  
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Rensa trassel

Staus beseitigen  
Afhjælp papirstop  
Fjerne fastkjørt papir  
清除卡紙

Eliminazione degli inceppamenti  
Storingen verhelpen  
Usuwanie zacięć  
Kağıt Sıkışmalarını Giderme

Eliminación de atascos  
Tukosten poistaminen  
Limpar atolamentos  
Eliminació d'embussos

紙詰まりの解消



# HP LaserJet P4010 and P4510 Series Printers



Clear Jams  
清除卡紙  
Elakadások elhárítása  
Устранение замятий

Eliminer les bourrages  
Odstranění uvíznutých médií  
용지 걸림 해결  
Rensa trassel

Staus beseitigen  
Afhjælp papirstop  
Fjerne fastkjørt papir  
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紙詰まりの解消

