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State of Minnesota
HOUSE OF REPRESENTATIVES

**EIGHTY-FIFTH
SESSION**

HOUSE FILE No. 3537

February 28, 2008

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The bill was read for the first time and referred to the Committee on Finance

1.1 A bill for an act
1.2 relating to energy; establishing rate schedule for certain renewable energy
1.3 projects; requiring a report; proposing coding for new law in Minnesota Statutes,
1.4 chapter 216B.

1.5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

1.6 Section 1. **[216B.1601] FINDINGS; PURPOSE; CITATION.**

1.7 (a) The legislature finds that:

1.8 (1) the state has a vital interest in ensuring that its citizens have a reasonable
1.9 opportunity to develop, own, and invest in renewable electricity generation;

1.10 (2) the economic benefits of local renewable energy development to Minnesota's
1.11 economy are critical factors in state agency decision making regarding energy procurement
1.12 and ratemaking;

1.13 (3) opportunities to own renewable electricity generation projects are particularly
1.14 important to the future economic development and quality of life of the state's rural
1.15 communities;

1.16 (4) the citizens of Minnesota have a vital interest in participating in the state's efforts
1.17 to limit greenhouse gas emissions through the development and ownership of renewable
1.18 electricity generation projects;

1.19 (5) the vast majority of Minnesotans are unable to benefit from the existing federal
1.20 renewable energy tax credit and other financial incentives supporting renewable energy
1.21 projects, and are therefore at a disadvantage relative to the large entities that are able to
1.22 utilize these federal incentives; and

2.1 (6) development of renewable energy in Minnesota requires that the state provide
 2.2 its citizens with an opportunity to sell power at a just and reasonable price to the utilities
 2.3 that serve them.

2.4 (b) The purpose of the tariff is to:

2.5 (1) allow all Minnesotans to participate in renewable electricity generation by
 2.6 requiring that utilities purchase such energy at a just and reasonable price;

2.7 (2) stabilize the Minnesota marketplace for the development of renewable energy;

2.8 (3) reduce the volatility of future electricity prices;

2.9 (4) lower the long-term cost of electricity;

2.10 (5) stimulate the development of new jobs, technologies, and industry in Minnesota;

2.11 (6) enable the rapid and sustainable development of Minnesota's abundant renewable
 2.12 energy resources for the generation of electricity with fewer environmental impacts, as
 2.13 required by Minnesota's renewable energy standards under section 216B.1691;

2.14 (7) assist Minnesota in achieving the greenhouse gas emissions-reduction goals
 2.15 established under section 216H.02, subdivision 1;

2.16 (8) reduce air pollution from Minnesota's electric generation sector;

2.17 (9) protect Minnesota's natural resources; and

2.18 (10) place Minnesota at the forefront among North America's renewable energy
 2.19 innovators.

2.20 (c) Sections 216B.1601 to 216B.1608 may be referred to as the Renewable Energy
 2.21 Feed-In Tariff Act of 2008.

2.22 **Sec. 2. [216B.1602] DEFINITIONS.**

2.23 Subdivision 1. **Adequate renewable energy development.** "Adequate renewable
 2.24 energy development" means a rate of development necessary to accomplish the renewable
 2.25 energy objectives and standards in section 216B.1691, subdivisions 2 and 2a.

2.26 Subd. 2. **Average specific yield.** "Average specific yield" means the average
 2.27 number of kilowatt hours produced during the initial five years of production of a wind
 2.28 energy conversion system, excluding the maximum and minimum years of production,
 2.29 divided by the rotor-swept area in square meters.

2.30 Subd. 3. **Capacity.** "Capacity" means the nameplate capacity of a renewable
 2.31 electricity generator.

2.32 Subd. 4. **Community-based energy development project or C-BED project.**
 2.33 "Community-based energy development project" or "C-BED project" has the meaning
 2.34 given in section 216B.1612, subdivision 2, paragraph (g).

3.1 Subd. 5. **Electric utility.** "Electric utility" means a public utility providing electric
3.2 service, a generation and transmission cooperative electric association, a municipal power
3.3 agency, or a power district.

3.4 Subd. 6. **Electrical distribution system.** "Electrical distribution system" means
3.5 that portion of the electric power system over which the Federal Energy Regulatory
3.6 Commission does not have authority to interconnect electric generators that sell electricity
3.7 in intrastate commerce only.

3.8 Subd. 7. **Facade cladding project.** "Facade cladding project" means a project in
3.9 which a photovoltaic device is attached to the wall of a building.

3.10 Subd. 8. **Open field project.** "Open field project" means a photovoltaic device that
3.11 has no physical connection to a building other than electric lines to transport electricity.

3.12 Subd. 9. **Photovoltaic device.** "Photovoltaic device" has the meaning given in
3.13 section 216C.06, subdivision 16.

3.14 Subd. 10. **Qualifying owner.** "Qualifying owner" has the meaning given in section
3.15 216B.1612, subdivision 2, paragraph (c).

3.16 Subd. 11. **Reasonable profit.** "Reasonable profit" means a rate of profit that is just
3.17 and reasonable, but not less than ten percent per year.

3.18 Subd. 12. **Renewable electricity generator.** "Renewable electricity generator"
3.19 means a project:

3.20 (1) that generates electrical energy by means of an eligible energy technology as
3.21 defined in section 216B.1691, subdivision 1, but does not include an energy recovery
3.22 facility used to capture the heat value of mixed municipal solid waste or refuse-derived
3.23 fuel from mixed municipal solid waste as a primary fuel; and

3.24 (2) in which one or more qualifying owners have at least a 51 percent ownership
3.25 interest.

3.26 Subd. 13. **Rooftop project.** "Rooftop project" means a project in which a
3.27 photovoltaic device is physically attached to the roof of a building.

3.28 Subd. 14. **Rotor-swept area.** "Rotor-swept area" means an area equal to 3.1416
3.29 multiplied by the square of the length of the rotor of a wind energy conversion system.

3.30 Subd. 15. **Small wind turbine.** "Small wind turbine" means a single wind turbine
3.31 with a rotor-swept area of no more than 1,000 square feet.

3.32 Subd. 16. **Wind energy conversion system.** "Wind energy conversion system" has
3.33 the meaning given in section 216C.06, subdivision 19.

3.34 Sec. 3. **[216B.1603] TARIFF ESTABLISHED.**

4.1 A tariff is established to provide opportunities for Minnesotans to own and invest in
4.2 renewable electricity generation by requiring utilities to purchase electrical energy at a
4.3 just and reasonable price from Minnesota-owned renewable electricity generation projects
4.4 connected to the electrical distribution system in accordance with the standard terms and
4.5 rates provided in sections 216B.1601 to 216B.1608.

4.6 Sec. 4. **[216B.1604] TARIFF.**

4.7 Subdivision 1. Utilities to offer tariff. By December 1, 2008, each electric utility
4.8 providing electric service at retail shall file for commission approval a tariff consistent
4.9 with this section.

4.10 Subd. 2. Tariff terms. An electric utility shall enter into a power purchase
4.11 agreement with the qualifying owners of a renewable electricity generator connected to the
4.12 electrical distribution system to purchase all of the electricity produced by the renewable
4.13 electricity generator. The term of the power purchase agreement must not be less than
4.14 20 years from the date of commissioning of the renewable electricity generator. The
4.15 rates of the power purchase agreement must be the rates established by the commission
4.16 under subdivision 3.

4.17 Subd. 3. Tariff rates. The tariff described in subdivision 1 must have a rate
4.18 schedule as follows.

4.19 (a) The rate for electricity generated by a wind energy conversion system must be
4.20 the rate needed to ensure adequate renewable energy development, plus a reasonable
4.21 profit, but no less than the following:

4.22 (1) for years one through five following commissioning of the project, \$0.105 per
4.23 kilowatt hour;

4.24 (2) for years six through 20 following commissioning of the project:

4.25 (i) \$0.105 per kilowatt hour for projects with an average specific yield less than 700
4.26 kilowatt hours per square meter per year;

4.27 (ii) \$0.08 per kilowatt hour for projects with an average specific yield greater than
4.28 1,100 kilowatt hours per square meter per year; and

4.29 (iii) a linear extrapolation between the rates in (i) and (ii) for a project with an
4.30 average specific yield greater than 700 kilowatt hours per square meter per year but less
4.31 than 1,100 kilowatt hours per square meter per year; and

4.32 (3) for a small wind energy conversion system, \$0.25 per kilowatt hour.

4.33 (b) The rate for electricity generated from hydroelectric power must be the lowest
4.34 rate needed to ensure adequate renewable energy development, plus a reasonable profit,
4.35 but no less than the following:

5.1 (1) \$0.10 per kilowatt hour for a project with a capacity below 500 kilowatts;

5.2 (2) \$0.085 per kilowatt hour for a project with a capacity of 500 kilowatts but less
5.3 than 10 megawatts; and

5.4 (3) \$0.065 per kilowatt hour for a project with a capacity of at least ten megawatts
5.5 but less than 20 megawatts.

5.6 (c) The rate for electricity generated by an anaerobic digester system, as defined in
5.7 section 216C.41, subdivision 1, paragraph (e), or other biomass system, as defined in
5.8 section 216C.051, subdivision 7, paragraph (g), clause (1), that operates at an efficiency
5.9 of 60 percent or greater, must be the rate needed to ensure adequate renewable energy
5.10 development, plus a reasonable profit, but no less than the following:

5.11 (1) \$0.145 per kilowatt hour for a project with a capacity below 150 kilowatts;

5.12 (2) \$0.125 per kilowatt hour for a project with a capacity of at least 150 kilowatts
5.13 but less than 500 kilowatts;

5.14 (3) \$0.115 per kilowatt hour for a project with a capacity greater than 500 kilowatts
5.15 but less than five megawatts; and

5.16 (4) \$0.105 per kilowatt hour for a project with a capacity of at least five megawatts
5.17 but less than 20 megawatts.

5.18 (d) The rate for electricity generated by landfill gas that operates at an efficiency
5.19 of 60 percent or greater must be the rate needed to ensure adequate renewable energy
5.20 development, plus a reasonable profit, but no less than the following:

5.21 (1) \$0.10 per kilowatt hour for a project with a capacity under 500 kilowatts; and

5.22 (2) \$0.085 per kilowatt hour for a project with a capacity of 500 kilowatts or more.

5.23 (e) The rate for electricity generated by a photovoltaic device must be the rate
5.24 needed to ensure adequate renewable energy development plus a reasonable profit, but no
5.25 less than the following:

5.26 (1) \$0.50 per kilowatt hour for a free standing or open field project;

5.27 (2) \$0.65 per kilowatt hour for a rooftop project with a capacity below 30 kilowatts;

5.28 (3) \$0.62 per kilowatt hour for a rooftop project with a capacity of at least 30
5.29 kilowatts but less than 100 kilowatts;

5.30 (4) \$0.61 per kilowatt hour for a rooftop project with a capacity of 100 kilowatts
5.31 or more;

5.32 (5) \$0.71 per kilowatt hour for a facade cladding project with a capacity below
5.33 30 kilowatts;

5.34 (6) \$0.68 per kilowatt hour for a facade cladding project with a capacity of at least
5.35 30 kilowatts but less than 100 kilowatts; and

6.1 (7) \$0.67 per kilowatt hour for a facade cladding project with a capacity of 100
6.2 kilowatts or more.

6.3 For the purposes of this subdivision, "efficiency" means the sum of the net useful power
6.4 output plus the net useful thermal output of an electricity generating system, which sum is
6.5 then divided by the total fuel input.

6.6 Subd. 3. **Reduction for other incentive programs.** The commission may not
6.7 approve a tariff established in this section that allows a project owner to receive federal or
6.8 state subsidies, tax credits, or other financial incentives available to owners of renewable
6.9 electric generation facilities, unless the tariff requires that those subsidies, tax credits, or
6.10 other financial incentives are deducted from the amounts paid to the project owner. This
6.11 subdivision does not apply to a tax under chapter 272 or to financial incentives available
6.12 to businesses that do not generate electricity from renewable sources.

6.13 Subd. 4. **Sale to nonqualifying owners limited.** During the term of a power
6.14 purchase agreement entered into under the tariff established in this section, no qualifying
6.15 owner may voluntarily sell its ownership interest in the renewable energy generator
6.16 unless the sale is to another qualifying owner and is approved by the commission. This
6.17 subdivision does not restrict transfers of interest by means other than voluntary sales.

6.18 Subd. 5. **Tariff review and adjustment.** (a) Beginning February 1, 2011, and
6.19 every two years thereafter, the commission shall review and adjust rates adopted under
6.20 the tariff in this section every two years as necessary to achieve adequate renewable
6.21 energy development; account for inflation; provide for a reasonable, but not excessive,
6.22 profit to owners of renewable electricity generators; promote development of C-BED
6.23 projects; and minimize costs to ratepayers of a utility's compliance with the renewable
6.24 energy standards under section 216B.1691.

6.25 (b) The commission may, after notice and hearing and upon finding that the
6.26 objectives in section 216B.1691 are not likely to be met without extending this tariff to
6.27 renewable electricity projects connected to the electrical transmission system, require
6.28 electric utilities to enter into power purchase agreements with qualifying owners at rates
6.29 in accordance with subdivision 2 as are necessary to achieve adequate renewable energy
6.30 development upon such terms needed to ensure accomplishment of C-BED procurement
6.31 goals and adequate local benefits as defined in section 216B.1691.

6.32 Subd. 6. **Interconnection.** The tariff in this section must provide that electric
6.33 utilities will interconnect renewable energy generators to the electrical distribution
6.34 system under the jurisdiction of the commission to the maximum extent of state
6.35 jurisdiction allowed under federal law. The commission shall consult with the Federal
6.36 Energy Regulatory Commission, the Midwest Independent System Operator, and other

7.1 appropriate entities to establish an interconnection request review procedure to promptly
7.2 and efficiently determine whether or not the commission may interconnect a renewable
7.3 energy generator that requests interconnection under state authority. The commission
7.4 shall issue orders necessary to establish interconnection tariffs for the standardized,
7.5 cost-effective, timely, reliable, and safe interconnection of renewable electricity
7.6 generators under state authority. The commission shall establish standard interconnection
7.7 contracts and interconnection schedules. The costs associated with the interconnection
7.8 of renewable electricity generators, including direct interconnection costs, distribution
7.9 system enhancements, and electric utility compliance costs, are recoverable as provided in
7.10 section 216B.1605.

7.11 Subd. 7. **Standard contract.** The commission shall approve a standard contract to
7.12 be used in all power purchase agreements under the tariff established under this section.
7.13 The contract must include the price paid for each kilowatt hour generated, a method to
7.14 adjust the price for inflation, and the duration of the contract.

7.15 **Sec. 5. [216B.1605] COST RECOVERY.**

7.16 The commission shall require an electric utility to file rate schedules containing
7.17 provisions for the automatic adjustment of charges for electric utility service in direct
7.18 relation to the cost of electricity purchased from renewable electricity generators under the
7.19 tariff established under sections 216B.1601 to 216B.1608 and all other costs required to
7.20 comply with the tariff established under section 216B.1604.

7.21 **Sec. 6. [216B.1606] INFORMATION REQUIRED.**

7.22 Renewable energy generators, qualifying owners that own all or part of a renewable
7.23 energy generator, and electric utilities shall, upon request, provide the commission any
7.24 information that may be relevant to the commission performing its duties under sections
7.25 216B.1601 to 216B.1608, including but not limited to assessment of project development
7.26 costs, equipment costs, electricity production costs, interconnection costs, automatic
7.27 rate adjustments, and compliance costs.

7.28 **Sec. 7. [216B.1607] LOAN ELIGIBILITY.**

7.29 A renewable electricity generator is eligible for a loan under section 216C.39,
7.30 subdivision 5.

7.31 **Sec. 8. [216B.1608] REPORT.**

8.1 By January 1 of 2010 and 2011 and every four years thereafter, the commission shall
8.2 submit a report to the governor and legislature that must include all of the following:

8.3 (1) the number of new renewable electricity generators in this state and the
8.4 environmental effects of the addition of those generators, including but not limited to the
8.5 effects on progress toward achieving the renewable energy objectives and standards in
8.6 section 216B.1691;

8.7 (2) recommendations for legislation and changes to the rates in section 216B.1604,
8.8 if any; and

8.9 (3) actions taken by the commission to implement sections 216B.1601 to 216B.1608
8.10 and to use the tariff to achieve the renewable energy objectives and standards in section
8.11 216B.1691.

8.12 **Sec. 9. EFFECTIVE DATE.**

8.13 Sections 1 to 8 are effective the day following final enactment.