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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2006

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A N A C T

RELATING TO PUBLIC UTILITIES -- DISTRIBUTED GENERATION

Introduced By: Senators Bates, Walaska, Polisen, and Roberts

Date Introduced: February 14, 2006

Referred To: Senate Financial, Technology, Regulatory

It is enacted by the General Assembly as follows:

1 SECTION 1. Title 39 of the General Laws entitled "PUBLIC UTILITIES AND
2 CARRIERS" is hereby amended by adding thereto the following chapter:

3 CHAPTER 28

4 DISTRIBUTED GENERATION

5 **39-28-1. Legislative findings.** – (1) The generation of electricity from sources deployed
6 around the electric distribution grid can increase the diversity of our state's energy sources, and
7 help maintain the stability of the electric grid.

8 (2) Renewable energy sources, and the co-generation of electricity and heat, are both
9 energy technologies most efficiently utilized when deployed at the point of use or distributed over
10 a wide geographic area.

11 (3) Greater use of distributed generation of electricity from renewables and combined
12 heat and power systems can give Rhode Island electric rate-payers the ability to better manage
13 growing energy costs, and facilitate new solutions to mounting energy problems.

14 (4) Greater use of renewable and combined heat and power systems can reduce the
15 environmental impacts of energy usage, in particular by reducing greenhouse gas emissions.

16 (5) Greater use of renewable and combined heat and power systems can contribute to
17 economic development and jobs for Rhode Islanders, place less public capital at risk by allowing
18 more private sector capital investment in energy infrastructure, and apply greater market
19 discipline to the electricity sector.

1 (6) Greater use of renewable and combined heat and power systems results in the more
2 efficient use of scarce and expensive fuels to generate electricity.

3 (7) Greater use of renewable and combined heat and power systems can provide benefits
4 to electric system efficiency and reliability, including reduce losses and congestion improved
5 voltage profiles, improved power quality, better distribution of reactive power resources,
6 reduction of system peak demands, avoided or deferred network additions, avoided Federally
7 mandated congestion and capacity charges, reduced dependence on electricity spot markets, and
8 demand response induced market price effects.

9 (8) The Independent System Operator for New England has indicated that the reduction
10 of peak demand should be a central strategy in reducing whole sale electricity prices.

11 (9) Distributed generation of electricity can be carried out safely, and without creating
12 negative impacts on the electric grid.

13 (10) The existence of these societal benefits represents a compelling public interest, and it
14 is in the interest of the people of Rhode Island to remove barriers to distributed generation and
15 provide incentives to foster its more widespread adoption.

16 **39-28-2. Definitions.** – (1) "Backup power rates", also called "standby rates", means the
17 utility rates that a customer pays to receive power from the grid at times when its own generation
18 is not in operation.

19 (2) "Commission" means the Rhode Island public utilities commission.

20 (3) "Combine heat and power system" means a system that produces, from a single
21 source; both electric power and thermal energy used in any process that results in an aggregate
22 reduction in energy use. To be considered a combined heat and power system for the purpose of
23 this chapter the system must achieve an average annual fuel conversion efficiency of at least fifty-
24 five percent (55%).

25 (4) "DG benefits study" means the investigation and analysis that the commission is
26 required to undertake pursuant to section 39-28-3.

27 (5) "DG societal cost" means the annual aggregate direct economic costs, less savings, to
28 Rhode Island of distributed generation statewide divided by the total number of megawatt-hours
29 delivered to end-use customers by all service providers in the same one year period. This term
30 can be either positive or negative. This calculation shall consider at a minimum the following
31 factors: (1) increased or decreased electric generation, transmission, and distribution capacity
32 costs, including regional locational charges; (2) avoided electricity production and/or purchase
33 costs; (3) reduced transmission and distribution losses associated with peak load reduction; (4)
34 impact on congestion costs; (5) impact on system reliability; (6) ancillary services, including

1 voltage stability and reactive power; (7) demand response induced price effects; (8) non-electric
2 fuel costs; and (9) environmental externality costs valued at the most appropriate traded or
3 implicit benchmark.

4 (6) "Eligible renewable sources" means those sources that have been certified by the
5 commission as qualifying for the renewable energy standard as specified in title 39-26.

6 (7) "End-use customer" means a person or entity in Rhode Island that purchases electrical
7 energy at retail from a service provider.

8 (8)"Net-metering" means billing or charging an end-use customer only for electricity
9 supply or services which is the net amount of electricity actually delivered to the client by a
10 supplier or service company, less any amount of electricity generated by or on behalf of the end-
11 use customer and put on to the electric distribution grid within the same transmission interconnect
12 area in which the end-use customer is located, as annualized over a one year period.

13 (9) "Qualified distributed generator" means either a combined heat and power system or
14 an eligible renewable source, as defined in this section"

15 (10) "Service providers" means electric distribution companies, electricity suppliers and
16 electricity service providers that an end-use customer may use or seek to use to provide for
17 electricity at the end-use customer's property.

18 (11) "Societal cost test" means the benefit-cost test which evaluates demand side
19 resources from a broad societal perspective. It is identical to the total resource cost test except
20 that the benefits include beneficial externalities, and the costs include negative externalities.

21 (12) "Total resource cost" (TRC) test means the benefit-cost test which measures the net
22 benefits or costs of a demand-side resource based on the total costs and benefits of the TRC
23 program, including both the participants and the utility's costs. The benefits of the TRC are
24 avoided supply costs. The costs in this test are the program costs (including equipment costs) plus
25 the increase in supply costs for any period in which load has been increased.

26 (13) "Transmission interconnect area" means the small of either: (i) any geographic area
27 in which electricity could travel from one point to another over distribution wires without being
28 transformed to a voltage of one hundred and ten (110) kilovolts; or (ii) the wholesale delivery
29 point of electricity supply as defined by the regional electricity transmission operator.

30 (14) "Utility cost test" means the benefit-cost test which measures the net costs of a
31 demand-side resource based on the costs included by the utility grid. The benefits for the utility
32 cost test are the avoided supply-side costs and other benefits provided to the utility grid. The costs
33 for the utility cost test are the program costs incurred by the utility, and any increased supply-side
34 costs.

1 **39-28-3. Impact evaluation.** – On or before December 31, 2007, the commission shall
2 conduct an investigation of the societal impact of distributed generation for the state of Rhode
3 Island. This investigation, call the DG Benefits Study, shall consider at a minimum each factor
4 delineated in the definition of DG societal cost above. The DG benefits study shall also include a
5 statistical assessment of the combined impact of many distributed generators of various types
6 operating on the electricity grid. The commission shall prepare a report with its findings to the
7 general assembly and governor on or before March 1, 2008.

8 **39-28-4. Rules and regulations established.** – By June 1, 2007, the commission shall
9 use the findings of the DG benefits study to establish and enforce regulations by which
10 distributed generation resources can qualify for net-metering rates and/or an exemption from
11 backup power rates as follows:

12 (a) If an end-use customer operates or has contracted for qualified distributed generator
13 capacity, the end-use customer shall not be required to pay backup power rates, unless it can be
14 demonstrated to the satisfaction of the commission, in a contestable hearing, that: (1) the
15 generator imposes more costs on the utility system than the benefits it provides (including
16 avoided costs), i.e., it fails the utility cost test; and (2) the generator imposes more costs on
17 society than the benefits it produces for society, i.e., it fails the societal cost test. The commission
18 can exempt classes of generators using these tests as informed by the DG benefits study. The
19 customer shall continue to be required to pay otherwise applicable charges for electricity
20 provided by the electric distribution company. Furthermore, no backup power rate shall be
21 imposed on qualified distributed generators that collect more in revenues than the net costs to the
22 utility system after subtracting benefits and avoided costs associated with the generation.

23 (b) The regulations shall require service providers to offer net-metering at non-
24 discriminatory rates, to residential, commercial, and industrial end-use customers using qualified
25 distributed generators, for the net amount of electricity supplied by the service provider over an
26 annualized period. Such net-metering rates shall be without surcharge or penalty to the end-use
27 customer, relative to the rate the end-use customer would be subject to without using distributed
28 generation or net-metering rates. For any billing period in which the amount of electricity
29 generated by the end-use customer, plus any credits from previous billing periods for generation
30 not used by the end-use customer and fed into the transmission interconnect area, exceeds the
31 electricity supplied by the service provider(s), the service provider(s) shall credit the end-use
32 customer for the excess generation until the end of the annualized period, at which point the end-
33 use customer will forfeit any such credit.

34 (c) Should the commission determine at any time, through evidence presented to it by a

1 service provider, that the DG societal cost is in excess of five dollars (\$5.00) per megawatt-hour,
2 in 2003 dollars adjusted annually up or down by the consumer price index, the commission may
3 disallow net-metering in certain areas, or over certain time periods, so as to reduce the DG
4 societal cost to below this amount. However, under no circumstances may the commission
5 disallow net-metering for end-use customers who have already made use of net-metering rates.
6 Service providers may recover actual costs of net-metering through regular rate-making
7 procedures, should they be able to demonstrate that such costs are in fact a direct result of net-
8 metering.

9 (d) The regulations shall contain provisions so as to ensure that distributed generation is
10 utilized safely and in a way that maintains power quality for all end-use customers. Such
11 regulations shall refer to an incorporate national, regional, or other state's standards or
12 regulations, as established by government entities or through common practice, to the greatest
13 extent possible, so as to harmonize and be consistent with the general electric industry, and to
14 foster the economic use of distributed generation. In no case shall such regulations be made more
15 burdensome than those regulations or practices which apply to end-use customers already
16 utilizing on-site generation. End-use customers whose net-metered generation is located on their
17 side of the meter and is two hundred (200) KW or less, may use a single, non-demand, non-time
18 differentiated meter, so long as such meters would normally be used if net-metering was not
19 being practiced. This requirement shall in no way limit distributed generation or other provisions
20 of this bill to generation under two hundred (200) KW.

21 **39-28-5. Further investigation by commission.** – On or before June 1, 2008, the
22 commission shall conduct and investigation as to whether or not it is in the public interest to order
23 the state's natural gas distribution companies to offer discounted natural gas rates for qualified
24 distributed generators. Such investigation shall base its decision on findings of the DG benefits
25 study, as well as any mitigating factors with respect to natural gas supply, distribution, or rate
26 design.

27 SECTION 2. Section 39-2-1 of the General Laws in Chapter 39-2 entitled "Duties of
28 Utilities and Carriers" is hereby amended to read as follows:

29 **39-2-1. Reasonable and adequate services -- Reasonable and just charges.** -- (a)
30 Every public utility is required to furnish safe, reasonable, and adequate services and facilities.
31 The rate, toll, or charge, or any joint rate made, exacted, demanded, or collected by any public
32 utility for the conveyance or transportation of any persons or property, including sewage, between
33 points within the state, or for any heat, light, water, or power produced, transmitted, distributed,
34 delivered, or furnished, or for any telephone or telegraph message conveyed or for any service

1 rendered or to be rendered in connection therewith, shall be reasonable and just, and every unjust
2 or unreasonable charge for the service is prohibited and declared unlawful, and no public utility
3 providing heat, light, water, or power produced, transmitted, distributed, delivered, or furnished
4 shall terminate the service or deprive any home or building, or whatsoever, of service if the
5 reason therefor is nonpayment of the service without first notifying the user of the service, or the
6 owner or owners of the building as recorded with the utility of the impending service termination
7 by written notice at least ten (10) days prior to the effective date of the proposed termination of
8 service.

9 (b) Any existing rules and regulations dealing with the termination of utility service and
10 establishing reasonable methods of debt collection promulgated by the commission pursuant to
11 this chapter and the provisions of section 39-1.1-3, including but not limited to, any rules and
12 regulations dealing with deposit and deferred payment arrangements, winter moratorium and
13 medical emergency protections, and customer dispute resolution procedures, shall be applicable
14 to any public utility which distributes electricity.

15 (c) The commission shall promulgate such further rules and regulations as are necessary
16 to protect consumers following the introduction of competition in the electric industry and which
17 are consistent with this chapter and the provisions of section 39-1.1-3. In promulgating such rules
18 and regulations, the commission shall confer with the Retail Electric Licensing Commission and
19 shall give reasonable consideration to any and all recommendations of the Retail Electric
20 Licensing Commission. In addressing reliability and other energy infrastructure needs for the
21 state's electrical system, the commission shall seek the least cost solution with equal
22 consideration and treatment of all available resources, including transmission, strategic
23 distributed generation, targeted energy efficiency, and demand response resources on a total cost
24 basis.

25 (d) (Effective until April 15, 2006.) The commission shall promulgate and administer
26 such rules and regulations as may be necessary to implement the purpose of this subsection and to
27 provide for restoration of electric and/or gas service to Protected Status Customers who are
28 terminated from utility service prior to August 15, 2005.

29 (1) Notwithstanding the provisions of part V section 4(E)(1)(B) and (C) of the Public
30 Utilities Commission Rules and Regulations Governing the Termination of Residential Electric,
31 Gas, and Water Utility Service, a protected status customer who is terminated from utility service
32 prior to August 15, 2005, shall be eligible to have electric and/or gas utility service restored
33 providing the following conditions are met: (i) the customer pays twenty percent (20%) of the
34 customer's unpaid balance; (ii) the customer agrees to pay one twenty-fourth (1/24) of the

1 customer's remaining balance per month for twenty-four (24) months, (iii) the customer agrees to
2 remain current with payments for current usage; and (iv) the customer has shown, to the
3 satisfaction of the division, that the customer is reasonably capable of meeting the payment
4 schedule provided for by provisions (i)-(iii) of this subsection 39-2-1(d)(1), and that the customer
5 shall agree to waive the right to a hearing for termination of service; provided that this waiver
6 provision shall apply exclusively to the provisions of this subsection and shall have no
7 precedential value for other proceedings before the commission or the division. Once service is
8 restored under the provisions of this subsection, such service may be terminated if payment is not
9 made within thirty (30) days after the billing date; provided, however, that termination of service
10 shall not take place during the moratorium on shut-offs.

11 (2) A customer terminated from service under the provisions of subsection 39-2-1(d)(1)
12 shall be eligible for restoration of service in accordance with the applicable provisions of part V
13 section 4(E)(1)(C) of the Public Utilities Commission Rules and Regulations Governing the
14 Termination of Residential Electric, Gas, and Water Service.

15 (3) The provisions of subsection 39-2-1(d)(1) shall be available if the initial payment for
16 restoration of service is made between April 15, 2005, and August 15, 2005, inclusive.

17 SECTION 3. Section 42-98-2 of the General Laws in Chapter 42-98 entitled "Energy
18 Facility Siting Act" is hereby amended to read as follows:

19 **42-98-2. Declaration of policy.** -- It shall be the policy of this state to assure that:

20 (1) The facilities required to meet the energy needs of this and succeeding generations of
21 Rhode Islanders are planned for, considered, and built in a timely and orderly fashion;

22 (2) Construction, operation, and/or alteration of major energy facilities shall only be
23 undertaken when those actions are justified by long term state and/or regional energy need
24 forecasts;

25 (3) The energy shall be produced at the least possible cost to the consumer consistent
26 with the objective of ensuring that the construction, operation, and decommissioning of the
27 facility shall produce the fewest possible adverse effects on the quality of the state's environment;
28 most particularly, its land and its wildlife and resources, the health and safety of its citizens, the
29 purity of its air and water, its aquatic and marine life, and its esthetic and recreational value to the
30 public;

31 (4) The licensure and regulatory authority of the state be consolidated in a single body
32 which will render the final licensing decision concerning the siting, construction, operation and/or
33 alteration of major energy facilities;

34 (5) An energy facility planning process shall be created through which the statewide

1 planning program, in conjunction with the division of public utilities and carriers, will be
2 empowered to undertake evaluations and projections of long and short term energy needs, and
3 any other matters that are necessary to establish the state energy plans, goals, and policies. The
4 state planning council shall be authorized and empowered to adopt a long term plan assessing the
5 state's future energy needs and the best strategy for meeting them, as part of the state guide plan
6 by January 1, 1991.

7 (6) The construction, operation and/or alteration of major energy facilities shall be
8 consistent with the state's established energy plans, goals, and policy.

9 (7) Before approving the construction, operation and/or alteration of major energy
10 facilities, the board shall determine whether cost-effective efficiency ~~and~~ conservation
11 opportunities, distributed generation, or other load-sited efficiency measures provide an
12 appropriate alternative to the proposed facility.

13 (8) The energy facilities siting board shall give priority to energy generation projects
14 based on the degree to which such projects meet, criteria including, but not limited to:

15 (i) Using renewable fuels, natural gas, or coal processed by "clean coal technology" as
16 their primary fuel;

17 (ii) Maximizing efficiency;

18 (iii) Using low levels of high quality water;

19 (iv) Using existing energy-generation facilities and sites;

20 (v) Producing low levels of potentially harmful air emissions;

21 (vi) Producing low levels of waste -water discharge;

22 (vii) Producing low levels of waste into the solid waste stream; and

23 (viii) Having dual fuel capacity.

24 The board shall, within its rules and regulations, provide guidelines and definitions of
25 appropriate standards for the criteria designated in this subsection by January 1, 1991.

26 (9) Nothing in this section shall be construed to exempt or otherwise negate existing
27 regulatory requirements of electric generation plants with regard to permits, air quality, land-use
28 or other regulatory considerations aside from those directly addressed here.

29 SECTION 4. Section 39-2-1.2 of the General Laws in Chapter 39-2 entitled "Duties of
30 Utilities and Carriers" is hereby amended to read as follows:

31 **39-2-1.2. Utility base rate -- Advertising, demand side management and renewables.**

32 -- (a) In addition to costs prohibited in section 39-1-27.4(b), no public utility distributing or
33 providing heat, electricity, or water to or for the public shall include as part of its base rate any
34 expenses for advertising, either direct or indirect, which promotes the use of its product or

1 service, or is designed to promote the public image of the industry. No public utility may furnish
2 support of any kind, direct, or indirect, to any subsidiary, group, association, or individual for
3 advertising and include the expense as part of its base rate. Nothing contained in this section shall
4 be deemed as prohibiting the inclusion in the base rate of expenses incurred for advertising,
5 informational or educational in nature, which is designed to promote public safety conservation of
6 the public utility's product or service. The public utilities commission shall promulgate such rules
7 and regulations as are necessary to require public disclosure of all advertising expenses of any
8 kind, direct or indirect, and to otherwise effectuate the provisions of this section.

9 (b) Effective as of January 1, 2003, and for a period of ten (10) years thereafter, each
10 electric distribution company shall include charges of 2.0 mills per kilowatt-hour delivered to
11 fund demand side management, including combined heat and power programs and 0.3 mills per
12 kilowatt-hour delivered to fund renewable energy programs. Existing charges for these purposes
13 and their method of administration shall continue through December 31, 2002. Thereafter, the
14 electric distribution company shall establish two (2) separate accounts, one for demand side
15 management, including combined heat and power programs, which shall be administered and
16 implemented by the distribution company, subject to the regulatory reviewing authority of the
17 commission, and one for renewable energy programs, which shall be administered by the state
18 energy office.

19 During the ten (10) year period the commission may, in its discretion, after notice and
20 public hearing, increase the sums for demand side management and renewable resources;
21 thereafter, the commission shall, after notice and public hearing, determine the appropriate charge
22 for these programs. The energy office and the administrator of the renewable energy programs
23 shall seek to secure for the state an equitable and reasonable portion of renewable energy credits
24 or certificates created by projects funded through those programs. As used in this section,
25 "renewable energy resources" shall mean power generation technologies as defined in section 39-
26 26-5, "eligible renewable energy resources". Technologies for converting solar energy for space
27 heating or generating domestic hot water may also be funded through the renewable energy
28 programs, so long as these technologies are installed on housing projects that have been certified
29 by the executive director of the Rhode Island housing and mortgage finance corporation as
30 serving low-income Rhode Island residents. Fuel cells may be considered an energy efficiency
31 technology to be included in demand sided management programs. Special rates for low income
32 customers in effect as of August 7, 1996 shall be continued, and the costs of all of these discounts
33 shall be included in the distribution rates charged to all other customers. Nothing in this section
34 shall be construed as prohibiting an electric distribution company from offering any special rates

1 or programs for low income customers which are not in effect as of August 7, 1996, subject to the
2 approval by the commission.

3 (c) The director of the state energy office is authorized and shall enter into a contract
4 with a contractor for the effective administration of the renewable energy programs funded by
5 this section. The director shall initiate the competitive bid process by the issuance and
6 advertisement of specifications and request for proposals, on or before September 1, 2002. The
7 contract resulting from the competitive bid process shall be awarded to become effective for a
8 three (3) year period commencing no later than January 1, 2003. A competitive bid and contract
9 award for administration of the renewable energy programs shall occur every three (3) years
10 thereafter.

11 SECTION 5. This act shall take effect upon passage.

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EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF
A N A C T
RELATING TO PUBLIC UTILITIES -- DISTRIBUTED GENERATION

1 This act would create a regulatory framework for distributed energy generation site
2 locations.

3 This act would take effect upon passage.

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