

CHAPTER 26

HB 873-FN-LOCAL – FINAL VERSION

05Apr2007... 0857h

05Apr2007... 1033h

02May2007... 1371eba

2007 SESSION

07-0208

06/04

HOUSE BILL **873-FN-LOCAL**

AN ACT establishing minimum renewable standards for energy portfolios.

SPONSORS: Rep. Harvey, Hills 21; Rep. Phinizy, Sull 5; Rep. Borden, Rock 18; Rep. J. Garrity, Rock 6; Sen. Fuller Clark, Dist 24; Sen. Bragdon, Dist 11

COMMITTEE: Science, Technology and Energy

AMENDED ANALYSIS

This bill:

- I. Establishes minimum electric renewable portfolio standards.
- II. Requires the commission to make reports to the general court.
- III. Requires the use of renewable energy certificates.
- IV. Requires the office of energy and planning to conduct a study of incentives to promote thermal renewable energy.

Explanation: Matter added to current law appears in bold italics.

Matter removed from current law appears [~~in brackets and struck through.~~]

Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

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STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Seven

AN ACT establishing minimum renewable standards for energy portfolios.

Be it Enacted by the Senate and House of Representatives in General Court convened:

26:1 Findings. The general court finds that:

I. New Hampshire's electric utility restructuring policy principles in RSA 374-F:3, IX recognize that increased use of renewable resources can provide environmental, economic, and energy security benefits.

II. In 2005, 2.3 million megawatt hours of electricity was generated from renewable energy facilities, including hydroelectric, biomass, and landfill gas power plants, with a combined generating capacity of 576 megawatts. This equaled 10 percent of the total electricity generation and 20 percent of the total retail electricity sales in New Hampshire in 2005.

III. The 2002 state energy plan prepared by the governor's office of energy and community services pursuant to 2001, 121 recommended establishing a renewable portfolio standard to support indigenous renewable energy sources such as wood and hydroelectric, to encourage investments in new renewable power generation in the state, and to allow New Hampshire to benefit from the diversity, reliability, and economic benefits that come from clean power.

IV. The state energy policy commission, established by 2006, 257:1 identified in its December 1, 2006 interim report principles that the governor and general court should use to evaluate any new energy policy initiative. One principle is to increase the state's fuel diversity by reducing the fossil fuel component of the state's energy mix and promoting use of renewable energy resources to buffer against global instability.

V. The energy planning advisory board established by 2004, 164:2 received extensive comments supporting establishment of a state renewable portfolio standard during a stakeholder forum on energy policy held June 23, 2006.

VI. Governor Lynch has committed New Hampshire to a goal of meeting 25 percent of the state's energy needs from renewable energy resources by 2025. Enactment of a renewable portfolio

standard in New Hampshire will be an important step in meeting this goal.

26:2 New Chapter; Electric Renewable Portfolio Standard. Amend RSA by inserting after chapter 362-E the following new chapter:

CHAPTER 362-F

ELECTRIC RENEWABLE PORTFOLIO STANDARD

362-F:1 Purpose. Renewable energy generation technologies can provide fuel diversity to the state and New England generation supply through use of local renewable fuels and resources that serve to displace and thereby lower regional dependence on fossil fuels. This has the potential to lower and stabilize future energy costs by reducing exposure to rising and

volatile fossil fuel prices. The use of renewable energy technologies and fuels can also help to keep energy and investment dollars in the state to benefit our own economy. In addition, employing low emission forms of such technologies can reduce the amount of greenhouse gases, nitrogen oxides, and particulate matter emissions transported into New Hampshire and also generated in the state, thereby improving air quality and public health, and mitigating against the risks of climate change. It is therefore in the public interest to stimulate investment in low emission renewable energy generation technologies in New England and, in particular, New Hampshire, whether at new or existing facilities.

362-F:2 Definitions. In this chapter:

I. "Begun operation" means the date that a facility, or a capital addition thereto, for the purpose of repowering to renewable energy is first placed in service for purposes of the implementing regulations of the Internal Revenue Code of 1986, as amended.

II. "Biomass fuels" means plant-derived fuel including clean and untreated wood such as brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips or pellets, shavings, sawdust and slash, agricultural crops, biogas, or liquid biofuels, but shall exclude any materials derived in whole or in part from construction and demolition debris.

III. "Certificate" means the record that identifies and represents each megawatt-hour generated by a renewable energy generating source under RSA 362-F:6.

IV. "Commission" means public utilities commission.

V. "Customer-sited source" means a source that is interconnected on the end-use customer's site of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

VI. "Default service" means electricity supply that is available to retail customers who are otherwise without an electricity supplier as defined in RSA 374-F:2, I-a.

VII. "Department" means the department of environmental services.

VIII. "Eligible biomass technologies" means generating technologies that use biomass fuels as their primary fuel, provided that the generation unit:

(a) Has a quarterly average nitrogen oxide (NOx) emission rate of less than or equal to 0.075 pounds/million British thermal units (lbs/Mmbtu), and an average particulate emission rate of less than or equal to 0.02 lbs/Mmbtu as measured and verified under RSA 362-F:12; and

(b) Uses any fuel other than the primary fuel only for start-up, maintenance, or other required internal needs.

IX. "End-use customer" means any person or entity that purchases electricity supply at retail in New Hampshire from another person or entity but shall not include:

(a) A generating facility taking station service at wholesale from the regional market administered by the independent system operator (ISO-New England) or self-supplying from its other generating stations; and

(b) Prior to January 1, 2010, a customer who purchases retail electricity supply, other than default service under a supply contract executed prior to January 1, 2007.

X. "Historical generation baseline" means:

(a) The average annual electrical production from a facility other than hydroelectric, stated in megawatt-hours, for the 3 years 2004 through 2006, or for the first 36 months after the facility began operation if that date is after December 31, 2001; provided that the historical generation baseline shall be measured regardless of whether or not the emissions from the facility during the baseline period meets emissions requirements of the class.

(b) The average annual production of a hydroelectric facility from the later of January 1, 1986 or the date of first commercial operation through December 31, 2005. If the hydroelectric facility experienced an upgrade or expansion during the historical generation baseline period, actual generation for that entire period shall be adjusted to estimate the average annual production that would have occurred had the upgrade or expansion been in effect during the entire historical generation baseline period.

XI. "Methane gas" means biologically derived methane gas from anaerobic digestion of organic materials from such sources as yard waste, food waste, animal waste, sewage sludge, septage, and landfill waste.

XII. "New England control area" means the term as defined in ISO-New England's transmission, markets and services tariff, FERC electric tariff no. 3, section II.

XIII. "Primary fuel" means a fuel or fuels, either singly or in combination, that comprises at least 90 percent of the total energy input into a generating unit.

XIV. "Provider of electricity" means a distribution company providing default service or an electricity supplier as defined in RSA 374-F:2, II.

XV. "Renewable energy source," "renewable source," or "source" means a class I, II, III, or IV source of electricity or electricity displacement by a class I source under RSA 362-F:4, I(g). An electrical generating facility, while selling its electrical output at long-term rates established before January 1, 2007 by orders of the commission under RSA 362-A:4, shall not be considered a renewable source.

XVI. "Year" means a calendar year beginning January 1 and ending December 31.

362-F:3 Minimum Electric Renewable Portfolio Standards. For each year specified in the table below, each provider of electricity shall obtain and retire certificates sufficient in number and class type to meet or exceed the following percentages of total megawatt-hours of electricity supplied by the provider to its end-use customers that year, except to the extent that the provider makes payments to the renewable energy fund under RSA 362-F:10, II:

2008 2009 2010 2011 2012 2013 2014 2015 2025

Class I 0.0% 0.5% 1% 2% 3% 4% 5% 6% 16%(*)

Class II 0.0% 0.0% 0.04% 0.08% 0.15% 0.2% 0.3% 0.3% 0.3%

Class III 3.5% 4.5% 5.5% 6.5% 6.5% 6.5% 6.5% 6.5% 6.5%

Class IV 0.5% 1% 1% 1% 1% 1% 1% 1% 1%

* Class I increases an additional one percent per year from 2015 through 2025. Classes II-IV remain at the same percentages from 2015 through 2025 except as provided in RSA 362-F:4, V-VI.

362-F:4 Electric Renewable Energy Classes.

I. Class I (New) shall include the production of electricity from any of the following, provided the source began operation after January 1, 2006, except as noted below:

- (a) Wind energy.
- (b) Geothermal energy.
- (c) Hydrogen derived from biomass fuels or methane gas.
- (d) Ocean thermal, wave, current, or tidal energy.
- (e) Methane gas.
- (f) Eligible biomass technologies.
- (g) The equivalent displacement of electricity, as determined by the commission, by end-use customers, from solar hot water heating systems used instead of electric hot water heating.
- (h) Class II sources to the extent that they are not otherwise used to satisfy the minimum portfolio standards of other classes.
- (i) The incremental new production of electricity in any year from an eligible biomass or methane source or any hydroelectric generating facility licensed or exempted by Federal Energy Regulatory Commission (FERC), regardless of gross nameplate capacity, over its historical generation baseline, provided the commission certifies demonstrable completion of capital investments attributable to the efficiency improvements, additions of capacity, or increased renewable energy output that are sufficient to, were intended to, and can be demonstrated to increase annual renewable electricity output. The determination of incremental production shall not be based on any operational changes at such facility but rather on capital investments in efficiency improvements or additions of capacity.
- (j) The production of electricity from a class III or IV source that has begun operation as a new facility by demonstrating that 80 percent of its resulting tax basis of the source's plant and equipment, but not its property and intangible assets, is derived from capital investment directly related to restoring generation or increasing capacity including department permitting requirements for new plants. Such production shall not qualify for class III or IV certificates.

II. Class II (New Solar) shall include the production of electricity from solar technologies, provided the source began operation after January 1, 2006.

III. Class III (Existing Biomass/Methane) shall include the production of electricity from any of the following, provided the source began operation prior to January 1, 2006:

- (a) Eligible biomass technologies having a gross nameplate capacity of 25 MWs or less.
- (b) Methane gas.

IV. Class IV (Existing Small Hydroelectric) shall include the production of electricity from hydroelectric energy, provided the source began operation prior to January 1, 2006, has a gross nameplate capacity of 5 MWs or less, has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.

V. For good cause, and after notice and hearing, the commission may accelerate or delay by up to one year, any given year's incremental increase in class I or II renewable portfolio standards requirement under RSA 362-F:3.

VI. After notice and hearing, the commission may modify the class III and IV renewable portfolio standards requirements under RSA 362-F:3 for calendar years beginning January 1, 2012 such that the requirements are equal to an amount between 85 percent and 95 percent of the reasonably expected potential annual output of available eligible sources after taking into account demand from similar programs in other states.

362-F:5 Commission Review and Report. Commencing in January 2011, 2018, and 2025 the commission shall conduct a review of the class requirements in RSA 362-F:3 and other aspects of the electric renewable portfolio standard program established by this chapter. Thereafter, the commission shall make a report of its findings to the general court by November 1, 2011, 2018, and 2025, respectively, including any recommendations for changes to the class requirements or other aspects of the electric renewable portfolio standard program. The commission shall review, in light of the purposes of this chapter and with due consideration of the importance of stable long-term policies:

I. The adequacy or potential adequacy of sources to meet the class requirements of RSA 362-F:3;

II. The class requirements of all sources in light of existing and expected market conditions;

III. The potential for addition of a thermal energy component to the electric renewable portfolio standard;

IV. Increasing the class requirements relative to classes I and II beyond 2025;

V. The possible introduction of any new classes such as an energy efficiency class or the consolidation of existing ones;

VI. The timeframe and manner in which new renewable class I and II sources might transition to and be treated as existing renewable sources and if appropriate, how corresponding portfolio standards of new and existing sources might be adjusted;

VII. The experience with and an evaluation of the benefits and risks of using multi-year purchase agreements for certificates, along with purchased power, relative to meeting the purposes and goals of this chapter at the least cost to consumers and in consideration of the restructuring policy principles of RSA 374-F:3; and

VIII. Alternative methods for renewable portfolio standard compliance, such as competitive procurement through a centralized entity on behalf of all consumers in all areas of the state.

362-F:6 Renewable Energy Certificates.

I. The electric renewable portfolio standard program established in this chapter shall utilize the regional generation information system (GIS) of energy certificates administered by ISO-New England and the New England Power Pool (NEPOOL) or their successors. If the regional GIS certificate tracking program administered by the ISO-New England is no longer operational or accessible, the commission shall develop an alternative certificate program, after public notice and hearing, designed to provide at least the same information on the type and generation of renewable energy resources as the GIS certificate tracking program.

II. The commission shall establish procedures by which electricity production not tracked by ISO-New England from customer-sited sources, including behind the meter production, may be included within the certificate program, provided such sources are located in New

Hampshire. The procedures may include the aggregation of sources and shall be compatible with procedures of the certificate program administrator. The production shall be monitored and verified by an independent entity designated by the commission, which may include electric distribution companies.

III. The commission shall designate in a timely manner New Hampshire eligible renewable sources together with any conditions pursuant to this chapter to the certificate program administrator under paragraph I, with such sources being the recipient of all certificates issued for purpose of this chapter.

IV.(a) Certificates issued for purposes of complying with this chapter shall come from sources within the New England control area unless the source is located in a control area adjacent to the New England control area and the energy produced by the source is actually delivered into the New England control area for consumption by New England customers. The delivery of such energy from the source into the New England control area shall be verified by:

(1) A unit-specific bilateral contract for sale and delivery of a source's electrical energy to the New England control area that is in place for the time period during which renewable certificates are generated;

(2) Confirmation from ISO-New England that the sale of the renewable energy was actually settled in the ISO market system; and

(3) Confirmation through the North American Electric Reliability Corporation tagging system that the import of energy into the New England control area actually occurred.

(b) The commission may impose such other requirements as it deems appropriate, including methods of confirming actual delivery of the electrical energy into the New England control area.

362-F:7 Sale, Exchange, and Use of Certificates.

I. A certificate may be sold or otherwise exchanged by the source to which it was initially issued or by any other person or entity that acquires the certificate. A certificate may only be used once for compliance with the requirements of this chapter. It may not be used for compliance with this chapter if it has been or will be used for compliance with any similar requirements of another non-federal jurisdiction, or otherwise sold, retired, claimed, or represented as part of any other electrical energy output or sale. Certificates shall only be used by providers of electricity for compliance with the requirements of RSA 362-F:3 in the year in which the generation represented by the certificate was produced, except that unused certificates of the proper class issued for production during the prior 2 years or the first quarter of the subsequent year may be used to meet up to 30 percent of a provider's requirements for a given class obligation in the current year of compliance.

II. Certificates from behind-the-meter distributed generation shall be initially issued to the owner of the customer-sited source or its designee, regardless of whether the source has received assistance from the renewable energy fund established in RSA 362-F:10.

362-F:8 Information Collection. By July 1 of each year, each provider of electricity shall submit a report to the commission, in a form approved by the commission, documenting its compliance with the requirements of this chapter for the prior year. The commission may investigate compliance and collect any information necessary to verify and audit the information provided to the commission by providers of electricity.

362-F:9 Purchased Power Agreements.

I. Upon the request of one or more electric distribution companies and after notice and hearing, the commission may authorize such company or companies to enter into multi-year purchase agreements with renewable energy sources for certificates, in conjunction with or independent of purchased power agreements from such sources, to meet reasonably projected renewable portfolio requirements and default service needs to the extent of such requirements, if it finds such agreements or such an approach, as may be conditioned by the commission, to be in the public interest.

II. In determining the public interest, the commission shall find that the proposal is, on balance, substantially consistent with the following factors:

(a) The efficient and cost-effective realization of the purposes and goals of this chapter;

(b) The restructuring policy principles of RSA 374-F:3;

(c) The extent to which such multi-year procurements are likely to create a reasonable mix of resources, in combination with the company's overall energy and capacity portfolio, in light of the energy policy set forth in RSA 378:37 and either the distribution company's integrated least cost resource plan pursuant to RSA 378:37-41, if applicable, or a portfolio management strategy for default service procurement that balances potential benefits and risks to default service customers;

(d) The extent to which such procurement is conducted in a manner that is administratively efficient and promotes market-driven competitive innovations and solutions; and

(e) Economic development and environmental benefits for New Hampshire.

III. The commission may authorize one or more distribution companies to coordinate or delegate procurement processes under this section.

IV. Rural electric cooperatives for which a certificate of deregulation is on file with the commission shall not be required to seek commission authorization for multi-year purchased power agreements or certificate purchase agreements under this section.

362-F:10 Renewable Energy Fund.

I. There is hereby established a renewable energy fund. This nonlapsing, special fund shall be continually appropriated to the commission to be expended in accordance with this section. The state treasurer shall invest the moneys deposited therein as provided by law. Income received on investments made by the state treasurer shall also be credited to the fund. All payments to be made under this section shall be deposited in the fund. The moneys paid into the fund under paragraph II of this section, excluding class II moneys, shall be used by the commission to support thermal and electrical renewable energy initiatives. Class II moneys shall only be used to support solar energy technologies in New Hampshire. All initiatives supported out of these funds shall be subject to audit by the commission as deemed necessary. All fund moneys including those from class II may be used to administer this chapter, but all new employee positions shall be approved by the fiscal committee of the general court.

II. In lieu of meeting the portfolio requirements of RSA 362-F:3 for a given year if, and to the extent sufficient certificates are not otherwise available at a price below the amounts specified in this paragraph, an electricity provider may, at the time of report submission for that year under RSA 362-F:8, make payment to the commission at the following rates for each megawatt-hour not met for a given class obligation through the acquisition of certificates:

(a) Class I- \$57.12.

(b) Class II - \$150.

(c) Class III - \$28.

(d) Class IV - \$28.

III. Beginning in 2008, the commission shall adjust these rates by January 31 of each year using the Consumer Price Index as published by the Bureau of Labor Statistics of the United States Department of Labor.

IV. The commission shall make an annual report by October 1 of each year, beginning in 2009, to the legislative oversight committee on electric utility restructuring under RSA 374-F:5 detailing how the renewable energy fund is being used and any recommended changes to such use.

362-F:11 Application.

I. The commission, in a non-adjudicative process, shall certify the classification of an existing or proposed generation facility by issuing a determination within 45 days of receiving from an applicant sufficient information to determine its classification. The application shall contain the following:

(a) Name and address of applicant.

(b) Facility location, ISO–New England asset identification number, and NEPOOL GIS facility code, if available.

(c) Description of the facility, including fuel type, gross generation capacity, initial commercial operation date, and, in the case of a biomass source, NOx and particulate matter emission rates and a description of pollution control equipment or practices proposed for compliance with applicable NOx and particulate matter emission rates.

(d) Such other information as the applicant may provide to assist in determining the classification of the generating facility.

II. The commission shall certify applications of customer-sited sources in a manner that is compatible with the procedures established for recognizing such production under RSA 362-F:6, II.

III. Biomass facilities otherwise meeting the requirements of a source shall be conditionally certified by the commission subject to compliance with the applicable NOx and particulate matter emission standards. Within 10 days of verification of compliance with emissions standards from the department, as provided in RSA 362-F:12, III, the commission, in a non-adjudicative process, shall designate the facility as eligible pursuant to RSA 362-F:6, III.

362-F:12 Verification of Emissions From Biomass Sources. Any source seeking to qualify using an eligible biomass technology shall verify emissions in accordance with the following methods:

I. For nitrogen oxide emissions, the source shall install and operate a continuous emissions monitor that meets departmental standards as codified in rules.

II. For particulate matter emissions, the source shall conduct an annual stack test in accordance with methods approved by the department. Upon completion of 3 annual tests which demonstrate compliance, the source may request of the department for a decrease in the frequency of testing, but to not less than once every 3 years.

III. Each such source shall file with the department and the commission within 45 days of the end of each calendar quarter an affidavit and documentation attesting to the source's average NOx emission rate for such quarter and the most recent particulate matter stack test results. For purposes of initial certification under RSA 362-F:6, the results of a stack test may be filed with the department at any time to demonstrate compliance with both the particulate matter and nitrogen oxide emissions standards. Within 30 days of a filing, the department shall provide verification of the emissions reported in the filing to the commission.

362-F:13 Rulemaking. The commission shall adopt rules, under RSA 541-A, to:

I. Administer the electric renewable portfolio standard program including the development of an alternative to the regional generation information system to the extent necessary.

II. Ascertain, monitor, and enforce compliance with the program to the extent not addressed in the department's rules.

III. Include within the program electric production not tracked by ISO-New England from eligible customer-sited sources.

IV. Administer the renewable energy fund and make expenditures from the fund.

V. Establish procedures for the classification of existing or proposed generation facilities, including a provision for a preliminary designation option, and to verify the completion of capital investments required of certain class I resources.

VI. Define when a repowered generation unit qualifies as a new class I source under RSA 362-F:4.

VII. Otherwise discharge the responsibilities delegated to the commission under this chapter.

26:3 New Subparagraph; Application of Receipts; Renewable Energy Fund. Amend RSA 6:12, I(b) by inserting after subparagraph 252 the following new subparagraph:

(253) Moneys deposited in the renewable energy fund established under RSA 362-F:10.

26:4 Default Service. Amend RSA 374-F:3, V(c) to read as follows:

(c) Default service should be designed to provide a safety net and to assure universal access and system integrity. Default service should be procured through the competitive market and may be administered by independent third parties. Any prudently incurred costs arising from compliance with the renewable portfolio standards of RSA 362-F for default service or purchased power agreements shall be recovered through the default service charge. The allocation of the costs of administering default service should be borne by the customers of default service in a manner approved by the commission. If the commission determines it to be in the public interest, the commission may implement measures to discourage misuse, or long-term use, of default service. Revenues, if any, generated from such measures should be used to defray stranded costs.

26:5 Competitive Electricity Supplier Requirement. Amend RSA 374-F:7, III to read as follows:

III. The commission is authorized to assess fines against, revoke the registration of, and prohibit from doing business in the state, any competitive electricity supplier which violates the requirements of this section or RSA 362-F.

26:6 Thermal Renewable Study; Statement of Purpose.

I.(a) Thermal renewable energy technologies provide fuel diversity to New Hampshire and New England energy supply through use of local renewable fuels and resources and have the potential to lower and stabilize future energy costs by helping to minimize regional dependence on imported fossil fuels such as natural gas, propane, and oil for heating and cogeneration.

(b) The increased use in New Hampshire and New England of thermal energy generated using low emission, renewable energy technologies will help to reduce the amount of nitrogen oxide, sulfur dioxide, particulate matter, and greenhouse gas emissions transported into New Hampshire and also generated in the state, thereby improving air quality and public health.

(c) In addition to benefits stated above, it is in the public interest to stimulate economic development by investment in low emission thermal renewable energy technologies in New England and in particular, New Hampshire.

II.(a) The office of energy and planning in consultation with the energy planning advisory board established by 2004, 164 shall study, evaluate, and make recommendations including potential legislation on:

(1) A thermal renewable portfolio standard and other incentives or mechanisms that will promote the use of high efficiency low emission thermal renewable energy technology and fuels in residential, commercial, and industrial applications;

(2) Regulatory, technological, or other impediments to the rapid deployment of thermal renewable energy systems; and

(3) Recommendations to the state and local governments on programs and actions that can be implemented to encourage residential, commercial, and industrial use of thermal renewable energy.

(b) The office of energy and planning shall solicit advice and expertise from members of the public representing thermal energy technology and fuels and may solicit the advice and expertise of any individual, state agency or organization, or state employee.

(c) The office of energy and planning shall report its findings and any recommendations for proposed legislation to the president of the senate, the speaker of the house of representatives, the senate clerk, the house clerk, the governor, and the state library on or before November 30, 2008.

26:7 Effective Date.

I. Sections 1-5 of this act shall take effect 60 days after its passage.

II. The remainder of this act shall take effect upon its passage.

Approved: May 11, 2007

Effective Date: I. Sections 1-5 shall take effect July 10, 2007.

II. Remainder shall take effect May 11, 2007.