

STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

DE 10-212

ESTABLISHING A COMMERCIAL AND INDUSTRIAL RENEWABLE  
ENERGY REBATE PROGRAM

Order Initiating Program

ORDER NO. 25,151

October 1, 2010

I. PROCEDURAL BACKGROUND

On August 10, 2010, the Commission issued a Notice of Opportunity to Comment and scheduled a hearing for public comment on a proposal to establish a commercial and industrial (C&I) renewable energy rebate, or incentive, program. Pursuant to RSA 362-F:10, V, the Commission established a residential renewable energy incentive program in July 2009. According to RSA 362-F:10, VIII, the Commission may, after notice and hearing, by order or rule, establish additional incentive or rebate programs for customer-sited thermal and renewable energy projects. The Commission previously stated its intent to create a renewable incentive program for C&I customers. *See*, Docket No. DE 10-024, *Residential Solar Hot Water Heating Rebate Program*, Order No. 25,092 (April 21, 2010) at 6.

In the Order of Notice in the instant proceeding, the Commission described a Staff proposal for a C&I program that would allocate at least \$1 million to an incentive program for solar electric (photovoltaic or PV) arrays and solar thermal systems for domestic hot water, space and process heat, with a capacity of 100 kW or equivalent thermal output or less. The rebate structure proposed in the “straw man” provided per kW incentive payments for PV systems as

follows: \$1.25 per Watt for the first 20 kW; \$1.00 per Watt from 21kW to 55 kW; and \$0.75 per Watt from 56 kW to 100 kW. The PV system rebate would be capped at 25% of the costs of the facility or \$50,000, whichever is less. For solar hot water (SHW) systems, the base rebate would be \$0.07 per rated or modeled kBtu/year, capped at 25% of the cost of the facility or \$50,000, whichever is less, as a one-time incentive payment. The "straw man" also suggested that the Commission consider setting aside a portion of the PV allocation for larger installations and establish a competitive process, such as a reverse auction, for selecting eligible systems.

The Order of Notice scheduled a technical session for August 19, 2010 for interested parties to meet with Staff to discuss the proposal. Twenty-two members of the public participated in the technical session.

On August 26, 2010, Staff filed a revised recommendation in response to comments received at the technical session. Notable revisions to Staff's initial proposal include the following:

1. Specify eligibility for space and process heating in solar thermal applications;
2. State that multi-family housing eligible for the C&I rebate must be a master-metered building with 3 units or more;
3. Allow eligibility for shared-ownership projects if the building owner is a partner or has granted permission for the installation;
4. Customers of municipal electric utilities should not be eligible for the rebate;<sup>1</sup>
5. New businesses, schools, etc. should be eligible to apply;
6. The Commission should retain flexible funding such that no less than 25% but no more than 75% of the funds go to either of the two approved technologies;
7. Allow system expansions to be eligible only for a reduced rebate relative to new systems;

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<sup>1</sup> The reason that customers of municipal utilities should not be eligible for the C&I program is that municipal utilities do not have to comply with the renewable portfolio standard requirements of RSA 362-F and, therefore, do not contribute to the Renewable Energy Fund which supports renewable energy initiatives such as the C&I incentive payment program.

8. Create minimum occupancy requirements for seasonal businesses that apply for the incentive payment;
9. Require third party inspection of the installations and bar installers from the program upon demonstration of poor performance by such inspection;
10. Require uniform technical standards to apply to installations; and
11. Require, at a minimum, a level II energy efficiency audit and a recommendation that the project owner install all measures with a simple payback of 2-3 years or less.

Staff also noted two limitations on the eligibility of commercial programs. First, pursuant to N.H. Code Admin. Rules Puc 2507.04, an eligible applicant must be an end-use customer of an electricity provider, which means that off-grid installations are not eligible for a C&I incentive payment. Second, the administrative rules limit the size of the eligible facility to 100 kW. Puc 2505.02.

The Commission received oral and written comments from many interested parties. A general description of the comments follows.

1. One party suggested that the Commission allow facilities installed within a certain period of time prior to the initiation of the C&I program to be eligible for a retroactive award.
2. One party recommended that the Commission allow wind systems to be eligible for an incentive payment.
3. Several parties asked the Commission to increase the capacity size for eligible facilities.
4. One party asked that the Commission allow geothermal technology to be eligible for an incentive payment.
5. One party suggested that the Commission retain the requirement that the applicant conduct an energy audit but not require energy efficiency measures to be installed.
6. One party suggested that the Commission remove the cap on payment amounts.
7. Several parties commented that the Commission should make the C&I program technology neutral and some of those parties recommended that the Commission use the C&I incentive payment budget as funding for a technology-neutral RFP.
8. There was a request for clarification on the eligibility of utilities in the program.

9. One party gave an analysis on the greater cost-effectiveness of solar hot water technology over solar photovoltaic technology and reiterated the importance of incenting energy output over capacity. By his calculations he figured that the proposed incentive of \$0.07 per kBtu/year of rated or modeled output was equivalent to a PV incentive of just \$0.3125 per kW of capacity. He also recommended a lower cap on solar thermal to allow more entities to take advantage of the program, keeping the program open to new installers, and an installer quota, provided that there is fair and unbiased enforcement of such a quota.
10. The importance of data monitoring and the installer quota was reiterated by another party, as well as the importance of strict material and labor warranties.
11. At least two stakeholders emphasized the importance of the third-party ownership model for renewable energy systems, and that there is a conflict with third-party owned systems being eligible for a rebate under current Commission rules (Ref. Puc 2507.04(c)(3)).
12. The importance of energy efficiency audit and audit rebates was highlighted.
13. A question was raised concerning whether the proposed program is consistent with HB 1270 (Chapter 254, Laws of 2010).

## II. COMMISSION ANALYSIS

The residential small renewable facility incentive payment and the proposed C&I incentive program are supported by the renewable energy fund (REF) created by RSA 362-F:10. Pursuant to RSA 362-F:3, providers of electric service must serve a certain percentage of their load with renewable energy, which is represented by renewable energy certificates (RECs) assigning one REC for each megawatt hour of power served. If the electric service provider is unable to acquire a sufficient number of RECs the provider must make an alternative compliance payment into the REF. RSA 362-F:10, II. The REF monies are to be used for the purposes of supporting thermal and electric renewable energy initiatives, including the C&I thermal and electrical incentive program approved by this Order.

The New Hampshire General Court placed certain restrictions on our allocation of REF monies. First, pursuant to RSA 362-F:10, X, which was enacted on July 6, 2010 for each 2-year

period commencing July 1, 2010, we must reasonably balance overall expenditures from the REF between the residential and non-residential sectors based on the proportion of electricity sold at retail to each sector. Currently, the relative electricity sales between the residential and non-residential sectors are 41% and 59%, respectively. Regarding the second restriction, we must issue a request for proposal for non-residential renewable projects not covered by the other incentive programs pursuant to RSA 362-F:10, XI, which reads as follows:

The commission shall issue requests for proposals that provide renewable projects in the nonresidential sector, which include commercial and industrial sited renewable energy projects, existing generators, and developers of new commercial-scale renewable generation in New Hampshire, with opportunities to receive funds from the renewable energy fund established under RSA 362-F:10. The requests for proposals shall provide such opportunities to those renewable energy projects that are not eligible to participate in incentive and rebate programs developed by the commission under RSA 362-F:10, V and RSA 362-F:10, VIII. The commission shall issue a request for proposals no later than March 1, 2011 and annually thereafter, and select winning projects in a timely manner.

Our first task is to develop the budget available for C&I programs. Electric providers deposited \$1.34 million into the REF on July 1, 2010, which resulted in a total REF balance of \$4.08 million for fiscal year 2011 (July 1, 2010 through June 30, 2011). After deducting the set-aside for the administrative budget and the residential solar thermal funding that had been allocated as a match for federal ARRA funds during fiscal year 2012, \$3.47 million will remain in the REF. The amount available for C&I initiatives is approximately \$2.05 million, 59% of the total REF balance. The following table illustrates the calculation of the described balance in the REF, commitments for administration and the residential solar thermal program, and the allocation between residential and C&I customers.

<b>2009 ACPs into REF</b>	<b>\$4,483,917</b>
Less, Admin.	\$221,996
Rebates paid	\$1,529,089
<b>REF Balance 6/30/2010</b>	<b>\$2,732,832</b>
2010 ACPs into REF	\$1,344,188
<b>REF Balance forward for FY 11 and future</b>	<b>\$4,077,020</b>
Less, Admin (budgeted)	\$360,326
Res. Solar Hot Water Heating Reserved for FY 2012	\$250,000
<b>Balance Available for FY 2011 Programs</b>	<b>\$3,466,694</b>
59% for C&I Programs	\$2,045,349
41% for Residential Programs	\$1,421,345

**\*\*\*\$2.045 million to be allocated between C&I rebate program  
and C&I RFP\*\*\***

Next, we must determine the appropriate balance to be allocated between the C&I PV and solar thermal incentive program and the RFP we are required to issue before this coming March. In Order No. 25,092 (April 21, 2010), we indicated that we would set aside \$1 million for a C&I incentive program. Following our release of a “straw man” proposal to create an incentive payment for solar PV and solar thermal, we received comments from some parties recommending that the C&I program be fuel or technology neutral – that is, rebates should be made available for all types of renewable technologies, including biomass, wind, and hydropower.

In addition, an issue was raised whether recent legislative action supports the creation of a C&I rebate program for PV and solar thermal. We have reviewed the legislative history and we do not interpret the requirement that we issue an RFP as barring the creation of other incentive programs. Pursuant to RSA 362:F:10, VIII, which was also amended by Chapter 254, Laws of 2010, the Commission “may, after notice and hearing, by order or rule, establish additional incentive or rebate programs and competitive grant opportunities for renewable

thermal and electric energy projects sited in New Hampshire.” Thus, we conclude that the requirement that we issue an RFP is in addition to the authority we have under RSA 362-F:10, VIII. We note as well that we heard comment at the public hearing to support this conclusion.

Ideally, the new C&I incentive program would be open to all renewable energy technologies. However, here we are faced with a very limited amount of funding for the remainder of the state fiscal year, and uncertainty as to what level of funding, if any, will be available through the REF for the following fiscal year. In addition, the time it would take to develop new rules, procedures and forms for the entire range of renewable technologies would delay the launch of the new C&I rebate program by at least several months. Furthermore there are significant challenges to developing technology neutral rebate programs, whether with fixed rebate levels or competitively bid incentive levels, that allows different types of systems and technologies to compete for funds using common metrics for capacity or projected output.

The RFP that must be issued before March 2011 will give all renewable technologies an opportunity to seek REF support for renewable projects on a competitive basis. We are mindful that we need to begin this process in a timely and transparent manner and direct Staff to work with the Energy Efficiency and Sustainable Energy Board to solicit input on the design of the RFP.

Given the foregoing, we conclude that the C&I program should initially focus on two technologies: solar PV and solar thermal. This approach also has the benefit of putting the funds to work in the economy in the near future and helps satisfy a known substantial demand for C&I renewable incentives. In the future, if REF revenues rise and there is adequate funding for the program already in place, we intend to expand the C&I rebate program to include other

renewable technologies for non-residential renewable generation. However, at present, we will allocate \$1 million to the C&I PV and solar thermal incentive program and \$1 million to the RFP. This allocation will not satisfy the individual interests of every participant in this proceeding, but we believe it is consistent with the requirements of law and with the purpose of RSA 362-F, which is to stimulate the production of renewable energy facilities in New Hampshire.

Also in light of the limited funds, we have decided to establish the per Watt incentive for PV installations at \$1.00 per Watt for all size installations, with a maximum incentive payment of \$50,000 or 25% of the cost of the project, whichever is less. We will establish the solar thermal rebate levels as originally recommended by the Staff at \$0.07 per rated or modeled kBtu/year, capped at 25% of the cost of the facility or \$50,000, whichever is less, as a one-time incentive payment. However, we do not believe that it is advisable to set aside money for larger installations because funds are limited. We conclude that putting the funds toward the incentive payments is a better use of the limited REF monies available to support C&I installations.

We also accept the recommendations of Staff found in its August 26, 2010 memorandum with a clarification regarding the eligibility of multi-family homes. To be eligible for a C&I rebate, multi-family housing that is operated as a commercial or non-profit enterprise must have 3 or more residences and those residences must not be eligible for the residential renewable rebate program established pursuant to RSA 362-F:10, V. In addition, we note that master-metering is prohibited for new construction. Any multi-family unit applying for the C&I rebate must be in compliance with N.H. Code Admin. Rules Puc 303.02.



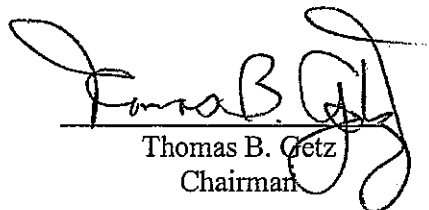
We have also determined that it is in the best interest of the program, consumers, and the industry at large to include an installer quota for the C&I PV and solar thermal incentive program. We note that other states have imposed similar installer quotas. For the C&I PV and solar thermal incentive program, each installer company will be allowed to obligate no more than \$200,000 in rebates at any given time during the first year of the program. The purpose of the quota is to maximize the development of a local installer industry for the C&I program.


We direct Staff to complete work on the application forms within 30 days of the date of this order. The full program terms, conditions, and technical requirements will be contained in the final application forms, including the Step 1 and Step 2 application forms. We will send a notice to the community of installers and other interested parties when we post the applications on our website.


**Based upon the foregoing, it is hereby**

**ORDERED**, that the Commission shall administer a commercial and industrial PV and solar thermal incentive program as more particularly described herein.

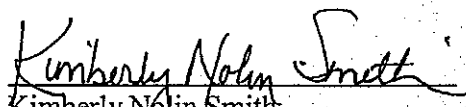
By order of the Public Utilities Commission of New Hampshire this first day of October,  
2010.

  
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10/01/10      Order No. 25,151 issued and forwarded to all parties.  
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