



The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

September 7, 2018

Ms. Debra A. Howland, Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301

RE: 2018 RPS Review

Dear Ms. Howland,

Thank you for the opportunity to comment as part of the 2018 electric renewable portfolio standards (RPS) review process. The New Hampshire Department of Environmental Services (NHDES) appreciates the thoughtful, analytical, and transparent process the PUC has taken in this review and offers the following comments regarding potential adjustments to the RPS Class requirements for the Commission's consideration.

Since the RPS was first enacted, major changes have occurred in the electricity market. Low natural gas prices now make it much more difficult for other types of generation, including renewables and non-emitting nuclear, to compete in the market. With the closing of Vermont Yankee and the scheduled closings of Pilgrim and Indian Point, depending on how those non-emitting sources are replaced all of the environmental benefits achieved to date by displacing fossil fuel fired generation with renewables may be lost. NHDES recommends adopting a policy of "do no harm", and adjustments to the RPS should strengthen it, such that existing nuclear plants may be retained and any nuclear plant closures may be offset by new renewable generation, rather than natural gas fired generation.

The purpose of the RPS was to establish a program that recognized the societal benefits of certain types of electricity generation that the electricity market does not take into consideration. The purpose statement of the statute reads as follows:

"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

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*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 (emphasis added).***"

It is important for the PUC to ensure that all of these factors are carefully considered and balanced in making any recommendations to the legislature for potential revisions to the RPS.

The market for NH Renewable Energy Credits (RECs) is complex and highly influenced by the regional nature of the New England electric "grid" and differing state RPS requirements. The current RPS statute includes obligations out to 2025. Energy supply projects require long-term planning and, therefore, benefit from long-term certainty in the market. Absent such certainty, developers' ability to secure financing supported by anticipated REC income is significantly impaired. NHDES feels that long term market stability is the best solution for ensuring compliance with the RPS, as the goal of the program is to see increased development of renewable resources in the region, as opposed to alternative compliance payments. Future revisions should be based on sound market information and analysis, and carefully consider any long term implications.

By statute (RSA 362-F:4,V and VI) , the PUC is allowed to delay by up to one year any given year's incremental increase in Class I requirements and modify Class III and Class IV requirements such that the requirements are equal to between 85% and 95% of the reasonably expected potential annual output of available eligible sources. Rather than adjusting the requirements such that Alternative Compliance Payments (ACPs) are reduced, the Commission could use any additional funds resulting from the unadjusted ACP for additional future grants to develop additional REC production from new renewable energy projects. Also, to address the utilities concerns that buying small quantities of RECs due to NH's subdivided RPS classes is too onerous, the PUC could propose for legislative consideration that it be allowed to buy and retire RECs from Class III and Class IV sources with the REF. This concept would be similar to that used by New York State Energy Research and Development Authority.¹

Current (2018) and long-term (2025) RPS requirements are as follows:

Year	Total	Class I Non-Thermal	Class I Thermal	Class II	Class III	Class IV
2018	18.70%	7.50%	1.20%	0.50%	8.00%	1.50%
2025	25.20%	12.80%	2.20%	0.70%	8.00%	1.50%

¹ <https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt0000005I4LVEA0>

Our remaining comments respond to information shared and discussions at the PUCs stakeholder meetings relative to this docket.

Slide #10 of the PUC's overview presentation from stakeholder session #1 on April 16, 2018 shows that for 2016 compliance was met with a mix of 85% RECs and 15% ACPs. Primarily, the ACPs were for Class I Thermal and Class IV Hydro. Class I Non-Thermal is generally regarded as over-supplied. NHDES sees no valid rationale for adjustments to these requirements at this time. The PUC should consider proposing additional requirements for legislative consideration beyond 2025.

In her presentation dated May 10, 2018, Lisa Linowes (Wind Action Group) made several recommendations:

1. ***Amend ACPs consistent with other states.***
 - a) *Impose flat \$56 ACP for Class I; remove CPI adjustment.*
 - b) *Increase Class II ACP to \$1.00 above 2018 MA Class I ACP (\$68.95); permit CPI adjustment thereafter.*
 - c) *Increase Class IV ACP to \$0.50 above 2018 MA Class II ACP (\$28.30); permit CPI adjustment thereafter.*
 - d) *Reduce Class III ACP to flat \$45 and retain.*

NHDES supports amending the ACPs to be consistent with other states' ACPs. For example, MA solar photovoltaics 2017 ACP is \$350 per MWh. Initially, ACPs were set consistent with other states, but these were changed over time by the Legislature. Returning to the original design would be advantageous.

2. ***Change in-service dates.*** *Change the in-service year for Class I (new) resources to January 1, 1998 to be consistent with the Massachusetts and Rhode Island RPS programs. The current in-service date is January 1, 2006.*

NHDES does not understand the rationale for recommendation #2. New Hampshire did not adopt an RPS until 2006. Landfills that were already in existence prior to the adoption of the RPS should not be considered "new" (Class I). Class III and IV (Existing) were originally included to retain existing biomass and hydro resources. Moving these resources to Class I would have a negative impact to the further development of Class I resources.

3. ***Reassess Class I-thermal percentage.***
 - a) *Reduce annual increases commensurate with growth; and/or*
 - b) *Grant PUC authority to administratively lower Class I and Class I-t mandates.*

As explained by Charlie Niebling (INRS) during the May 10th session, the supply of thermal RECs or TRECs was small in the initial years for various reasons. However, the supply is gradually growing. NHDES works closely with the PUC during the approval process for TRECs. New (2017 or later) projects (Froling Energy, Keene State College, Merrimack County DOC (prison), and Rockingham County Complex) have been approved and are expected to add to the supply. Additional projects (Sullivan County Complex, Grafton County Complex, the City of Claremont, and Weeks Medical Center) may qualify in the future. Furthermore, several smaller projects at schools across the state have, and will continue to qualify as eligible to receive TRECs. Thus, NHDES recommends no adjustment to the Class I Thermal requirements at this time. If the PUC decides to reduce the requirements of this award-winning program, NHDES recommends a corresponding increase to the Class I Non-Thermal requirements, such that total Class I requirements remain the same. The ample supply of non-thermal RECs could be drawn down slightly by increasing the Class I Non-Thermal requirements.

- 4. Increase transparency (HB 225)** Additional reporting on the flow of RECs to better inform the PUC, the legislature, buyers/sellers of RECs, and the public, assist in connecting REC buyers and sellers, and generally inform policy adjustments.

In general, NHDES supports greater transparency, provided that it can be achieved simply and cost-effectively.

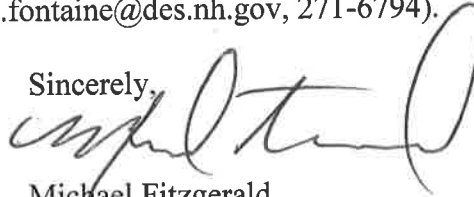
Similarly, it has been suggested to consolidate all RPS classes into one class and include zero-carbon resources such as nuclear power and large hydropower among eligible technologies. Since nuclear and large hydro are existing resources that were not counted toward the 25.2%, their RECs will not help increase renewable energy, but will have the opposite effect and could potentially result in a net loss of renewables. If these resources are to be included, the required percentage should be raised accordingly to properly balance the market. Absent raising the requirement, the result is likely to be that many more RECs will flood the market, causing Class I REC prices to decline to near zero. Low value RECs from these two technologies will be used to completely fulfill the RPS requirement. Lack of REC revenues will seriously jeopardize the future of existing biomass and small hydro plants. The disappearance of existing renewables will mean that they will have to be replaced with new renewables, in order to achieve the requirement of 25.2% by 2025.

NHDES was actively involved in the initial (2006) proposal of the RPS. At that time, NHDES supported exclusion of nuclear power and large hydro power on the basis that these two technologies did not need a financial incentive in order to be competitive. NHDES is open to reconsideration of the financial status of these two technologies. However, as part of any such reconsideration the PUC should require such sources to share their financial information and demonstrate economic hardship.

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Thank you again for the opportunity to comment. If you have any questions, please contact either myself, (Michael.Fitzgerald@des.nh.gov, 271-6390) or Joseph Fontaine, Technical Programs Manager, (joseph.fontaine@des.nh.gov, 271-6794).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Fitzgerald", written over a faint, illegible background.

Michael Fitzgerald
Assistant Director
Air Resources Division

