

Innovative Natural Resource Solutions LLC

37 Old Pound Road Antrim, NH 03440 603-588-3272

www.inrsllc.com

September 7, 2018

Karen Cramton NH Public Utilities Commission 21 S. Fruit St., Suite 10 Concord NH 03301-2429

Dear Ms. Cramton:

Innovative Natural Resource Solutions LLC is pleased to submit these comments to inform the NH PUC's statutorily mandated review of the NH Renewable Portfolio Standard. We have focused our comments on the statutory study requirements defined in RSA 362-F:5. The first section offers general comments on the function of the RPS. The second section offers several specific technical improvements that we believe will enhance the function and cost effectiveness of the Class I thermal provisions of the RPS.

I. General Comments on Function of RPS

1. Update the RPS to be more in line with other state RPS goals

We urge the New Hampshire Public Utilities Commission ("the Commission") to recommend that the legislature increase the RPS targets to better align with neighboring states. Increasing the RPS targets will better position the state to compete for local, low-cost clean energy projects and good local jobs, while diversifying the state's electric and thermal energy supply and reducing harmful emissions. Increasing these targets will also help New Hampshire

reduce the need for imported energy from outside of New England, especially heating fuels on which New Hampshire is nearly entirely dependent on imported fossil energy. We recommend an orderly prescribed phase up in class requirements to at least 35% of REC qualified electric load through 2035.

2. Do not collapse the four existing REC classes into a single REC class

New Hampshire should not collapse the four existing and well-established REC classes into one REC class. Such a step would create chaos for existing and planned projects designed and financed based on the current class structure and anticipated REC pricing. System owners who have invested in eligible energy resources have relied on the reasonable understanding that the current REC classes will remain in place, allowing them to meet necessary return rates based on longstanding financial analysis. Collapsing or reducing those class values would not only severely damage existing project owner returns but would also have a chilling effect on the market resulting in a potential halt to the majority of new projects.

Continue to use of the Renewable Energy Fund (REF) solely as a dedicated funding source for further eligible renewable energy development, as intended under the statute.

The Alternative Compliance Payment ("ACP") mechanism established pursuant to RSA 362:F:10 helps to provide a cap on REC prices and makes possible the effective use of ACP funds for REC-eligible renewable energy investments through the Renewable Energy Fund ("REF"). The ACP is an important complement to the core RPS and its renewable resource targets, and funds collected through the ACP should be used to advance the purposes of the RPS. RSA 362-F:10(I) directs that the funds collected through the ACP should be invested in renewable energy resources including "solar energy technologies in New Hampshire" and "thermal and electrical"

renewable energy resources." *Id.* (I). ACP funds are intended to be used to help stimulate new investment that will generate additional RECs in future years, keeping costs down and ensuring continued growth of renewable energy. Using the REF for any purpose other than its statutorily intended purpose – to advance renewable energy – is inappropriate and may be unconstitutional. We also hope the PUC's analysis will reinforce the need to avoid legislative misappropriation ("raiding") of REF revenues for purposes unrelated to the statute.

Due to market interactions in the region and overlapping REC eligibility, significant price differentials between the ACP levels in states can be arbitraged. It may be beneficial for New Hampshire to harmonize the ACP with levels more in line with its neighbors in order to maximize the benefit of local projects.

4. Keep nuclear power and large-scale hydropower out of the RPS.

The intent of the RPS is to increase the state's development and use of renewable energy, not to incentivize the greater use of nuclear power, which is not a renewable energy resource or a local resource, and should not be eligible for RECs. Moreover, the notion that New Hampshire can prop up the nuclear industry through its RPS is faulty. Any such effort would have to be broader in scope. Including nuclear energy in the New Hampshire RPS would be an egregious waste of limited state resources.

Large-scale hydropower, while renewable, similarly does not fit the parameters defined by the legislature and is a long-established resource with ample available markets and economies of scale. In addition, because there are no local large-scale hydroelectric power facilities, its inclusion in the RPS would not meet the legislature's goal to support "local

renewable fuels and resources" and to "help keep energy and investment dollars in the state to benefit our own economy."

II. Specific Comments on Function of Class I thermal

- 1. Allow greater flexibility to satisfy heat metering requirement with innovative alternative methodologies. In RSA 362-F:2, XV-a, the statute defines useful thermal energy as energy that "can be metered". We do not interpret this as an absolute requirement for physical metering, yet this has been the NHPUC's unnecessarily restrictive interpretation. We urge the PUC to recommend that the legislature amend this to read "can be metered or verified by other means satisfactory to the commission" to allow the PUC greater flexibility in approving alternative methodologies for estimating useful thermal energy output. A similar approach was taken in Massachusetts with the APS and has allowed MA DOER greater flexibility in approving alternative heat verification methodologies. The objective should be to allow project developers to propose the least expensive verification methodology that will satisfy the PUC's requirement for accuracy and accountability.
- 2. <u>Align the emissions limits for biomass electric facilities with the emissions limits for biomass thermal</u>, which will facilitate adoption of smaller scale biomass combined heat and power. Right now, the biomass electric emissions limits are very strict no matter what the size is, which makes it nearly impossible to cost effectively generate Class I electric RECs with a small backpressure steam turbine. Also, this pellet boiler is available in NH which can generate electricity http://www.maineenergysystems.com/pellematic-e-max/ and due to its small size, it can qualify for thermal RECs no problem, no stack test required, but if an owner wanted to generate Class I electric RECs, they would need to perform quarterly stack tests (not possible

for such a small stack), as well as install an industrial-scale continuous NOx emissions monitoring system on it.

3. <u>Clarify the date biomass thermal systems are certified as REC eligible after stack testing.</u>

We recommend an amendment to administrative rules for biomass systems between 3 and 30

mmbtu such that if NHDES certifies the results of a stack test, the facility will have been

deemed to be compliant with the emissions limit retroactive to the beginning of the quarter in

which the stack test was conducted, or to when modified emissions control equipment was

operational, whichever comes later. The current administrative rules delay eligibility until the

next quarter. We recommend that emissions certification for eligibility allow for eligibility as of

the date of the stack test, if all other documentation has been received by the commission.

4. We recommend the 5% cap on accuracy be changed to 10% in Puc 2506.04 (e)(2), (e)(3),

(f)(2), and (f)(3). This would make it easier to qualify metering systems especially for small

systems that don't have a large metering budget, and would not affect ultimate REC accuracy

because the RECs would be discounted by the uncertainty of the meter, thus the claimed RECs

would only reflect what we knew to be true production.

Thank you for the opportunity to submit these comments.

Sincerely,

Charles R. Niebling

Partner, Innovative Natural Resource Solutions LLC

Concord NH

603.965.5434

niebling@inrsllc.com