The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

April 3, 2015

Debra A. Howland, Executive Director
State of New Hampshire
Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, New Hampshire 03301-2429

Re: Docket No. IR 15-072, Energy Efficiency Investigation

Dear Ms. Howland:

Thank you for the opportunity to provide written comments relative to the Public Utility Commission's (PUC) report entitled "Energy Efficiency Resource Standard: A Straw Proposal for New Hampshire."

The Department of Environmental Services (DES) appreciates the work of PUC Staff to document and make available for review a synthesis of their discussions with New Hampshire stakeholders. DES is not providing comments on all recommendations made in the Straw Proposal as we are not subject matter experts on all aspects of Energy Efficiency Resource Standards (EERS). Therefore, the comments below reflect those areas in which DES either has some level of direct knowledge or wishes to highlight existing studies or other information that has been presented previously and should be considered in development of a New Hampshire EERS.

Energy efficiency is a non-emitting energy resource; thus, a key strategy in reducing emissions of air pollutants and greenhouse gases from electric generation and building conditioning. Furthermore, cost-effective efficiency measures that would be captured under an EERS meet energy demand at a cost lower than supply, reducing costs to all ratepayers. DES strongly supports development of an EERS and concurs with the Straw Proposal recommendation that the PUC should establish this under existing authority in the near term.

Development of a successful EERS for New Hampshire will require input from EERS experts on many specific aspects of the program, such as targets, target metrics, eligible measures, measurement and verification, and other important features. To further inform both interested parties and the PUC it is important to hear from and converse with subject matter experts to inform decisions regarding the many facets of an EERS. Such experts could include the Regulatory Assistance Project, ACEEE, NEEP and program administrators from states with successful programs. The established monthly meetings of the Energy Efficiency and Sustainable Energy Board may offer a convenient forum for such sessions. DES strongly encourages PUC to facilitate open, independent technical exchange forums so that all parties

may avail themselves of the technical expertise as noted above and thus provide fully informed input on the particulars of an EERS for New Hampshire.

All New England states, except New Hampshire, have established an EERS and adopted, in some form, an "all cost-effective" efficiency requirement. For example, Vermont electric utility savings are expected to achieve cumulative savings of approximately 6 percent from 2012 to 2014. The remaining New England states have established separate savings targets for their gas and electric utilities, with electric targets ranging from 1.4 to 2.6 percent *annual* savings by 2015, with gas targets somewhat below these levels[1]. The Straw Proposal recommends 1 percent for the electric sector in year eight of the standard, topping out at 1.31 percent in the final year. For gas utilities the Straw Proposal remains at a static 0.7 percent annual savings from year two to year ten. The programs in neighboring states capture more cost-effective efficiency in shorter timeframes than those suggested in the Straw Proposal, thus inviting a closer examination of their programs, particularly since some New Hampshire utilities also operate efficiency programs in these neighboring states.

Studies conducted for the state have indicated that far higher potential gas and electric savings from energy efficiency are available in New Hampshire[2] than those proposed. As noted in the 2009 GDS "potential" study[3], "To achieve our potential, a concerted, sustained campaign involving aggressive programs and market interventions would be required." Through input from technical experts, as previously recommended, the PUC and stakeholders can develop and support EERS gas and electric targets that are realistic and achievable, and that provide appropriate market signals and incentives to move well beyond the current capacity of the Core utility programs.

The modeling analysis, presented starting on page 21 of the Straw Proposal, indicates that the recommended EERS targets are based on currently available funding, yet "fully embrace the 'all cost effective measures' principle." Since achieving all cost-effective efficiency would necessarily require funding beyond current levels it is unclear how the analysis reconciles this conflict. There are also inconsistencies in Table 1 on page 20 and the narrative relative to the model which indicates a 5 percent per year increase in the electric targets. To enable a fuller understanding of modeled outcomes we request that the model that was utilized be made available in a transparent format so that interested parties can see what assumptions were made,

---

[1] http://aceee.org/sites/default/files/pdf/policy-brief/eers-04-2014.pdf

[2] The 2009 GDS Associates Inc. report, *Additional Opportunities for Energy Efficiency in New Hampshire,* estimated the "potential opportunity" for *annual* energy savings of approximately 11 percent at the close of a ten year program, with "potential opportunity" defined as "an estimate of the potential for the realistic penetration over time of energy efficient measures that are cost effective according to the NH TRC, taking customer behavior into consideration (including consideration of priorities and price)." The 2013 Vermont Energy Investment Corp, et al report, *Increasing Energy Efficiency in New Hampshire: Realizing Our Potential*, provided a very conservative estimate of potential energy savings for just the gas and electric "Core" efficiency programs of 1.7 percent annually at the end of five years.

[3] http://www.puc.state.nh.us/Electric/GDS%20Report/NH%20Additional%20EE%20Opportunities%20Study%202-19-09%20-%20Final.pdf

particularly if the Commission intends to use this model as the basis for decisions on an EERS framework and targets.

DES appreciates the emphasis in the Straw Proposal regarding the need to bring additional private investment in energy efficiency to the state to capture all cost-effective efficiency. A strong energy policy, including an EERS with targets that go beyond currently available funding, will send a market signal that the State of New Hampshire is ready to join our neighboring states in investing in efficiency, thus making investment of private capital in the state more attractive.

The Straw Proposal discusses the negative effect of potential bill impacts on those who do not participate in energy efficiency programs (Section 5.2 of the report). Recommendations made include consideration of how to mitigate bill impacts to non-participants. DES agrees that the success of an EERS over the long term will rely on capturing efficiency opportunities throughout a broad swath of the population, but is concerned that this focus on non-participants loses sight of the fact that energy efficiency measures taken anywhere on the grid ultimately benefit all ratepayers by reducing overall demand and slowing the growth of peak demand. The Independent System Operator of New England (ISO-NE) noted in a 2012 presentation[4] that the region's investments in energy efficiency have already saved New England customers $260 million by deferring the need to upgrade transmission lines and other equipment. Non-participants will indeed have higher bills than those who invest in energy efficiency, but their bill will still be lower than it would have been but for those investments. Likewise, the Analysis Group's 2011 report[5] on the economic impacts of investment of Regional Greenhouse Gas Initiative funds in energy efficiency found that, "Customers save nearly $1.1 billion on electricity bills, and an additional $174 million on natural gas and heating oil bills, for a total of $1.3 billion in savings over the next decade through installation of energy efficiency measures….."

DES commends the recommendation relative to evaluation, measurement and verification (EM&V) in the Straw Proposal to, "strengthen...existing Core-driven EM&V and to cooperate more closely with the NEEP Regional EM&V Forum." This is in line with our previous recommendation to take full advantage of expertise available to us to maximize the effectiveness and help ensure the success of a New Hampshire EERS. Stringent EM&V becomes all the more important as program targets become mandatory under and EERS.

Finally, DES agrees that any capture of energy efficiency will ultimately be reflected in our compliance with the Environmental Protection Agency's Clean Power Plan (CPP). However, DES cautions that New Hampshire should not be looking at CPP compliance as a target for an EERS. Regardless of how the State ultimately complies with the CPP, capture of all cost-effective energy efficiency, even if it is not needed as a compliance mechanism for the CPP, benefits consumers and helps further protect New Hampshire's environment and the health of our citizens.

---

[4] http://www.iso-ne.com/nwsiss/pr/2012/ee_forecast_slides_final_12122012.pdf

[5] The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States

Thank you again for the opportunity to provide comments on the Straw Proposal. DES looks forward to collaborating with the PUC and other stakeholders to develop a viable and strong EERS that will provide both environmental and economic benefits to New Hampshire citizens.

Respectfully,

Rebecca E. Ohler

Rebecca E. Ohler
Administrator, Technical Services Bureau
Air Resources Division