September 19, 2023

Dear Representative Sheldon, Representative Sibilia, Senator Bray, and Senator Watson,

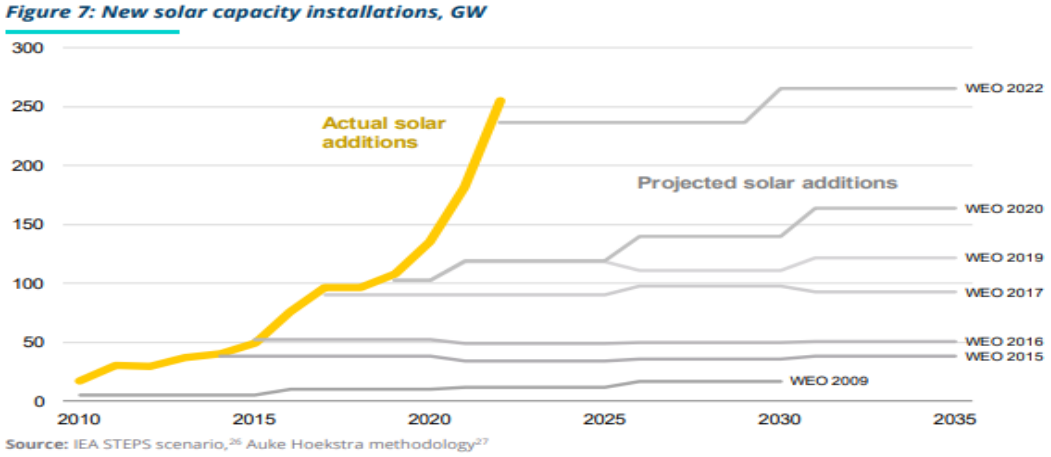
Last Friday we shared the attached letter with the Department of Public Service outlining our concerns with the modeling planned for its Technical Analysis efforts. At 4:00 pm yesterday we received additional information from the Department about their modeling which addressed one of our core concerns but left several other issues unaddressed.

Here we summarize the points raised in our letter to the Department, *in italics*, and how each point is addressed in the information provided by the Department yesterday. Our attached letter from Friday addresses each of these points in greater detail.

1. *Modeling does not incorporate storage or load flexibility*. *Storage and other sources of load flexibility are being deployed today and will grow dramatically by 2035 but these technologies are not represented in the Technical Analysis.* This has not been addressed. The Department continues to state that it may be able to use the modeling results to estimate how much storage may be needed in the future but there is no indication that the interaction of load flexibility and renewables will be considered.
2. *Modeling undervalues distributed electric generation because it neglects the benefits of the grid upgrades that are paid for by renewable projects*. The Department acknowledges that upgrades paid for by renewable projects have non-zero benefits to the grid as a whole and has committed to researching an appropriate value for this benefit.
3. *Modeling undervalues distributed electric generation because it does not consider how optimally sited renewable projects can maximize distribution system benefits*. The Department has made clear that this is a state-level study and will not be able to consider the benefits of optimizing siting.
4. *The Clean Energy Standard scenario uses resources that could be better spent on other sensitivity analyses*. The Department has not responded to this concern nor has the Department or consultant provided a full list of the sensitivities that will be conducted during the modeling process.

We believe that these omissions will artificially inflate the cost of the scenarios that rely more heavily on variable renewable generation – wind and solar – and scenarios that rely on distributed generation – such as the projects built to satisfy Tier II requirements.

In this vein, we believe that all too often the modeling of renewable generation overstates the barriers to renewable deployment. For example, the Rocky Mountain Institute's July 2023 report *X-change: Electricity On Track for Net Zero* shows the gap between solar installation forecasted and actual solar installation around the globe.



Relying on such a forecast to set renewable energy targets would result in targets that are considerably less ambitious than what was actually achieved.

We are concerned that relying too heavily on unnecessarily conservative modeling results that undervalue the benefits of renewable energy will inadvertently lead Vermont to set targets for renewable energy that are significantly less ambitious than is merited to meet the climate crisis at hand.

With that said, there are elements of the Department's analysis that we believe are very valuable. The Department's early commitment to include the social cost of carbon in this analysis and its commitment to reporting the physical greenhouse gas emissions changes that these policy scenarios have at the regional level (across ISO-New England's generating portfolio and power imports) are foundational to fully capturing the benefits of switching to renewables energy.

Sincerely,

Peter Sterling, Executive Director
Renewable Energy Vermont