

— Solar Ordinance Review —

September 21, 2022

Planning Board
8 Newmarket Road
Durham, NH 03824

Dear Members of the Board,

The first thing I want to say is, we absolutely could benefit from an aggressive transitioning away from fossil fuels. The urgency is real.

Analysis after analysis show that New Hampshire sorely lags behind our New England neighbors on just about every renewable energy and energy efficiency measure, whether for today or moving into the future. Policies set in Concord are severely limiting our ability to make progress. For example, New Hampshire is the only New England state without a statutory mandate for greenhouse gas reductions, and we lack policies that could incentivize mitigating investments. Durham cannot move the needle by itself.

We are nonetheless at a philosophical crossroads. In reviewing the ordinance, I hope that the Board will be guided by a Town Council Goal that acknowledges both the need and the reality: “Adopt a solar ordinance updated to more effectively govern the placement of solar panels that supports a range of community priorities.”

The ordinance under consideration

Councilor Lawson has submitted an excellent working document. As shown in his presentation, he has brought forward a large portion of the Planning Board’s earlier work.

He has also paid close attention to our Master Plan. Threaded throughout current and past Master Plans one finds numerous references to the community’s appreciation for our farms, wetlands, forests, and scenic beauty, as well as a strong preference for balance.

I believe this proposed ordinance manages to establish balance, with perhaps an exception here and there that will certainly be discussed.

Please refer to the suggested further revisions brought forward by the Conservation Commission, Beth Olshansky, Mal Sandberg, and Jim Lawson, himself. I support the majority of those and hope you will incorporate them. I also encourage the Board to consider the Agricultural Commission’s comment regarding storage of solar energy.

Additional questions and recommendations

1. Special Exceptions are necessary; are the criteria adequate as written?

At the May 9, 2022 Town Council meeting, Administrator Selig noted that the Rural and the RC zones “really do warrant some special consideration as to how we address” freestanding solar systems. A scenario he envisioned is that a homeowner might be required, perhaps due to a special configuration of the property, to seek a Special Exception from the ZBA, is then granted a Special Exception, but does not or cannot provide the mitigations that the neighborhood had hoped for.

To head off at least some of those situations, it would be useful for the Board to consider examples of situations requiring Special Exception and how the ZBA might respond.

2. Prioritize locations

To minimize land use conflicts, allow positioning of large-scale solar systems only on already-developed and degraded, or less valuable lands.

Today’s *New York Times* published a guest essay titled “Are There Better Places to Put Large Solar Farms Than These Forests?” The answer is yes.

...Rooftops and parking lots combined could, in theory, meet nearly 80 percent of the nation’s electricity needs, according to the Department of Energy. But absent incentives, such sites are generally more expensive to develop than forest or farmland.

[<<https://www.nytimes.com/2022/09/21/opinion/environment/solar-panels-virginia-climate-change.html>>]

As land is developed, remaining undeveloped land becomes more valuable—in all senses of the word—to a community. Across the country, states and towns are pushing back against solar farms, whether by limiting locations or outright moratoria, in part because they know that forests provide irreplaceable ecosystem services that are also key to mitigating or adapting to climate change. (Think about the impacts of clearing the Amazon jungle.)

For example, a report issued last year by the Pew Charitable Trusts, titled “Locals Worry Wind and Solar Will Gobble Up Forests and Farms,” notes:

“Increasingly, states that are embracing renewable energy run into opposition, and two of the biggest reasons are prime farmland being lost and also ecological areas,” said Maryland Secretary of the Environment Ben Grumbles. “We need to put a much greater focus on trying to steer these important projects to locations that are going to be more acceptable. The conflicts are growing and the need for innovative solutions is growing too.”

[<www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2021/04/30/locals-worry-wind-and-solar-will-gobble-up-forests-and-farms>]

Protecting forests from becoming solar farms is not only about carbon sequestration. As important may be their functions in supporting wildlife, preventing erosion, filtering air- and water-borne pollutants, and managing stormwater. They also provide passive cooling, reducing demand on air conditioning, a high-fuel-use amenity that may humans may ratchet up as global warming hits home and the Baby Boomer generation ages and becomes more vulnerable to extreme heat.

It is abundantly clear that the locations investors in large solar farms prefer are the very same areas—forests and agricultural fields—that benefit us all when they are left undeveloped.

Why should we trade off those far-reaching benefits to profit those outsiders?

Why should Durham sacrifice such valuable ecosystem services before we exhaust other options?

3. Respect competing values, thereby avoid backlash and promote broader solar system support: The “expressive force of law” will kick in

In evaluating the proposed Solar Ordinance, it is useful to consider why we want such an ordinance in the first place and what we can reasonably expect it to accomplish.

This ordinance will not persuade or dissuade those who have hesitated to add or transition to solar energy systems for nonregulatory reasons, e.g., financial. It will not make a material dent in mitigating the global effect of climate change. But while contributing to the common good, this ordinance can help individual property owners reduce their energy costs and/or avoid the volatility or scarcity of energy supply.

The Conservation Commission’s note to the Board, dated August 9, 2022, recommends prohibiting freestanding solar energy systems within the WCOD and SPOD. Chair Jake Kritzer’s letter states, “Furthermore, we recognize that such restrictions can help build public support for solar energy development, which can contribute to scaling and aggregate environmental benefits.”

Exactly. Put more formally:

...the “expressive force of law” feedback loop, the idea that changes to laws can shape broader social norms, the way smoking bans in restaurants helped reduce smoking throughout society.

[“Better climate models would build in political and personal decisions: Climate systems are social systems, too, and political scientists and the foreign policy community need to take that into account,” by Daniel Baer and Noah J. Gordon, Washington Post, August 25, 2022

<www.washingtonpost.com/outlook/2022/08/25/climate-models-social-policymakers/>]

So, choose a progressive, rather than aggressive, position

New Hampshire is desperately in need of more renewable energy generation. Allowing solar panels of any size and in any location would indeed generate more “green” electricity locally, but even that amount would hardly make a dent in mitigating climate change.

On the other hand, it could easily result in backlash. As Councilor Carden Welsh noted at the July 11th Town Council meeting: “...I think if you can put [solar] in in a way that I thought the current ordinance would allow, you can do it in a way that will keep a strong contingent of people pushing for more and more solar without a lot of pushback from other people.”

We have imperfect land use regulations, even when it comes to the common good.

And, thus, it is also incumbent upon our town leaders to find a path through the tangle of community values ranging from aesthetics and regard for our historic built and agricultural heritage, to the widely-held belief that we must act with urgency to take meaningful steps to adapt to our changing world.

Move it forward, or time to “fast-track it”

September 27th will mark five years since the Town began to discuss creating a solar ordinance. That lengthy interval has provided the serendipitous benefit of giving us the opportunity to incorporate group net metering options, thanks to recent State-enabling legislation. But it’s time to get something on the books.

Swiftly sending the draft back to the Council will allow any Durham property owners who have been hesitating for lack of guardrails the clarity to move forward with their solar installations.

Our history with site plan regulations and zoning amendments proves that it is only through the test of time that we can tweak them to accommodate unforeseen situations and adjust to changing realities. This amendment will undoubtedly prove no different. So I also hope that you will heed the cliché, “Don’t let the perfect be the enemy of the good.”

Five years. It’s time to move this forward. I support Chair Rasmussen’s July 13th objective, phrased as “We’ll be fast-tracking this one.”

Regards,

Robin