

May 29, 2020

Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, Massachusetts 02114
Attn: Ms. Kaitlin Kelly

Subject: SMART Public Comment re: 225 CMR 20.00 and Guidelines Regarding Land Use, Siting, and Project Segmentation

I write with my concerns regarding the April 15, 2020 revisions to the Massachusetts SMART program. I serve on both the Belchertown Planning Board and Belchertown's SolarizeMass Committee, so have insights on both small and large solar in our area. Last year the Planning Board reviewed 9 applications for large-scale commercial solar installations—each in a hurry to beat the others into the SMART queue. The Board permitted 6 of the projects, denied just two, and one is still in redesign. Our SolarizeMass team wrapped up in March 2020, having secured 73 signed contracts for domestic solar installations, and would have welcomed more. By any measure, our Green Community has been a solar-friendly town.

I also serve on the Board of Trustees of the Belchertown Historical Association (founded in 1903 to preserve 100 acres of pristine forest) and am a founding member of Friends of the Pelham Hills (FPH), first organized to oppose several large-scale commercial solar arrays threatening 250 acres of sloped forestland and its cold water fishery, now working proactively with the town's Conservation Commission to secure more of our forestland for conservation.

Progress, but not there yet

I commend the DOER for tackling these necessary revisions and am gratified that the proposed revisions offer some of the land use protections identified during last September's comment period. Improved incentives for <500kW and <25kW are great. But we still have some big issues around land use.

The Greenfield subtractors should be 5 times what the revisions propose in order to discourage the use of forested and other undeveloped land. In addition to increasing the Greenfield subtractors, limits should also apply to the acreage of the entire development, including the cleared areas that surround the panels. It is a proven reality of these projects that they require significant tree clearing well beyond that needed for the arrays themselves. Were SMART to cap tree clearing for any array at 10 acres and overall acreage at 20 acres, it would both address land-use problems and encourage the development of increasingly higher-efficiency and smaller-sized panels.

The new energy storage requirements for > 500kW projects could quadruple the acreage of projects in central and western Massachusetts. The 5MW AC cap in the 2018 SMART typically meant a minimum of 20 acres of panels, already a huge sacrifice of our carbon-sequestering forest habitat. With adders for on site energy storage, that acreage could increase to 80 acres of panels, clearly undermining an intent of that 5MW AC cap. Devastating environmentally, and devastating

for property values in the residential neighborhoods expected to embrace 8 of the 9 proposals that have come before our Planning Board since 2018 (only one applicant proposed an array in our industrial zone). All indicators are that on site energy storage at that scale will also add noise to the equation, requiring as they do, more inverters, batteries, and their necessary air conditioning. This patchwork response to our fundamentally inadequate utility infrastructure (see the National Grid Cluster studies) will have unintended but brutal and immediate consequences on our rate-paying rural neighbors. That we don't know the true environmental costs of the eventual decommissioning of batteries and panels is also troubling.

Strengthen restrictions on siting in BioMap2 land I am happy to see that the revisions restrict siting in BioMap2 land. This is a commendable and important step. But the new rule should not be gutted by requiring that more than 50% of a parcel fall within the BioMap2. A parcel including BioMap2 should be protected *absolutely*. And given that the BioMap2 system is not yet comprehensive— my own property, for example, rightly appears on BioMap2, while a neighbor's property with identical forest, wildlife, slope, soil type, etc. does not—the rules should ensure for similar restrictions on land not yet on BioMap2.

Forests critical to Combatting Climate Change

Which brings us to forests: “by far —by thousands of times—the cheapest climate change solution,” (*Science*, 2019: 365 (6448)). Where have the SMART revisions placed forest lands that, for the inconsistent reasons cited in previous paragraph, are not yet on BioMap2? The revisions address land in chapter 61A specifically, but not land in chapter 61 or 61B. We see loopholes in the SMART revisions that developers and large landowners— motivated by the speed and greed factors intrinsic to these incentives—may use to circumvent the added protections. Were they to offer large on-site battery storage to compensate for deforestation could a project that requires significant clear-cutting and grubbing still get itself into a category that should not permit such cutting? Can a landowner/developer secure themselves a spot in Category 1 simply by giving to the town the land on which they've erected their lucrative solar panels?

Eliminate loopholes Any loophole language that permits incentives for clear cutting should be eliminated. Far better to encourage forest protection by offering its owners incentives well beyond those offered by Chapter 61. Forest loss diminishes our capacity to mitigate climate change. In the Pioneer Valley, since 2018, 77% of large-scale solar has been on previously undeveloped forested land.

Competing Interests To protect against further forest fragmentation many towns and land trusts are scurrying to purchase either forest acreage or its development rights. Friends of the Pelham Hills, with the Conservation Commission, is currently assembling letters of support for a state land grant for the acquisition of undeveloped forest acreage in our neighborhood. The acreage we wish to conserve abuts another large forest parcel whose owner/developer is currently suing the town over a denied special permit for large-scale solar. The 2018 SMART incentives have essentially “outbid” local conservation groups in their efforts to buy development rights on environmentally critical acreages. Pitting one state agency's mission against another's is bad policy.

Learn from SolarizeMass: Offer Oversight

An increase in incentives for <25kW “behind-the-meter” solar is good. Residents who installed their rooftop or ground mounted solar under SREC received better incentives than current participants in SolarizeMass do. Such installations with no negative impact on the environment deserve higher incentives.

Serving on SolarizeMass/Belchertown, I witnessed an admirable level of support for the community: weekly call-in sessions; careful vetting of every installer who received the RFP, and helpful guidance through the bid process.

This is in stark contrast with interactions between towns CSPI developers. A CSPI engineers who argued for a 5MW array on the neighboring property claimed that mounting more than 20,000 panels on their site’s 10 to 20 degree slopes posed no risks. But our SolarizeMass installer, with whom we contracted for a 16-panel ground-mounted array, ultimately returned our deposit, determining that installing on our 10-15 degree slope into bedrock was “beyond what they could execute.”

We need the DOER to demand the same caution of CSPI. The DOER should establish basic safety guidelines that would take incentives out of the equation for some sites. Municipalities like Belchertown have written those protections into their bylaws. But leadership on basic environmental and property protections should come from the top.

DOER should disallow projects deforesting more than 10 acres; disallow projects on slopes greater than 10% for both the arrays and their total project areas; disallow projections likely to have issues with stormwater (an ever-increasing threat in our hill towns).

A disastrous failure

The Massachusetts Attorney General has recently filed a lawsuit (Commonwealth of Massachusetts vs Dynamic Energy Solutions LLC Case 1:20-cv-10814-DPW) against a developer whose CSPI in Williamsburg caused “irreparable harm,” to a protected cold water fishery. The construction altered “97,000 square feet of protected wetlands and more that 41,000 feet of riverfront area, covering the bottom of the river with the equivalent of more than an acre of sediment pollution.” The work “caused sediment-laden stormwater to be discharged in extreme amounts from the site, eroding the hillside, scouring out perennial and intermittent streams, uprooting trees, destroying streambeds, filling in wetlands with sediment and causing the river to become brown and turbid.”

This harm has **happened** and is described by our state’s AG as irreparable.. This irreparable harm **happened** on a smaller site, with fewer issues than those at 0 Gulf Rd. in Belchertown.

A Belchertown example of community struggle

Beginning in July 2018, and taking seriously its status as a green community, Belchertown’s Planning Board held 8 public hearings on the 0 Gulf Rd. CSPI. The Board generously allowed and

reviewed 13 increasingly convoluted redesigns of a poorly engineered 5MW solar installation on an inappropriate site (like much of western Massachusetts land, forest in chapter 61, steep, with thin soils over bedrock and historically forested). In 2019 the Planning Board voted **unanimously** to deny a site approval and special permit for the proposal. The developer's response to a unanimous decision: sue the Planning Board. The town's Conservation Commission had earlier denied a permit based on Belchertown's WPA bylaws, while heavily conditioning an approval based on the state's WPA. The developer's response: sue the Conservation Commission and the Select Board. In addition to the Superior Court lawsuits, the developer filed a request with the DEP for a Superseding Order of Conditions, to which the Friends of the Pelham Hills (FPH) has filed an appeal. The DEP determined that the conditioned approval ought never to have been granted, but allowed the applicant to redesign yet again.

For almost a year this proposal—one of nine such proposals—monopolized the time of the town's professional staff, its dedicated volunteers on the Planning Board and the Conservation Commission, and more than 50 residents committed to the town's resiliency. These scattershot lawsuits are squandering the town's legal budget, as well as that of the FPH. The applicant has repeatedly asked for extensions on their DEP submittal deadline in order that they may "review anticipated changes to the SMART program." Now, the health and safety of the neighborhood AND the profitability of the development which would at best radically alter, but more likely irreparably harm that neighborhood? Paradoxically, both rest in the specifics of the SMART revisions. With that power must come responsibility and oversight.

In the Belchertown case, the neighbors were well-informed and included a professional hydrologist. The Planning Board was scrupulously fair and also well-informed and concluded that the risks were too great to grant a permit. A failure at this particular site—with its massive clear cutting and grubbing of an established forest, its extreme slopes, its bedrock and soil types and depths, its groundwater at less than 4 feet, its multiple intermittent and perennial streams, its cold water fish resource, its bizarre stormwater mitigation system which includes a hybrid detention/retention basin 400' long, 16' high designed for millions of gallons of water and located at the top of a 100 foot slope not 500 feet from an abutter's home? A failure at this site would risk not just irreparable harm to the environment, but also to properties and people living below it. Planning Boards are typically staffed by volunteers and are therefore variable in their level of expertise. Not every neighborhood has a resident USGS hydrologist. Belchertown was lucky to stop—at least temporarily—an impossible installation. Towns should not have to depend on luck to protect their neighborhoods.

Leadership from the top: Validate and Emulate Community Bylaws

In response to the Gold Rush realities of large-scale solar developments, Belchertown revised its solar bylaws, passing the revisions by more than a 2/3 majority at its 2019 Town Meeting. Our bylaws are comprehensive and detail-rich. On page 1. Section B, Applicability, a prospective applicant knows immediately that Not permitted are

- (a) Any CSPI of greater than 20 acres in fenced array area.
- (b) Any CSPI requiring forest clearing greater than 10 acres.

- (c) Any CSPI on slopes of 8% or greater as averaged over 50 horizontal feet
- (d) Any CSPI on a parcel with inadequate frontage as defined etc.

This should streamline every application and construction of an eligible CSPI. I'd urge every community to develop their own set of bylaws, tailored to their own needs; bylaws that could make them enthusiastic participants in making Massachusetts fossil-fuel-free. They could then work willing to help developers site appropriate solar in their communities instead of exhausting themselves and their budgets fighting inappropriate ones.

The DOER would serve itself, the environment, and every community in the state were they to exclude from eligibility for the SMART program any CSPI requiring forest clearing greater than 10 acres, and any CSPI on slopes of 8% or greater as averaged over 50 horizontal feet. Doing so would in the long run make the SMART program run smoother, keeping deserving proposals from having to wait in a stalled queue while ineligible ones wage multi-year legal campaigns to pursue inappropriate installations.

I hope that you take this into account as you finalize revisions to the SMART program.

Thank you,
Elizabeth Pols
44 North St.
Belchertown MA 01007