

July 11, 2017

Judith Judson, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, #1020
Boston, MA 02114

Submitted via email to DOER.SMART@state.ma.us

RE: Comments on Emergency Regulations 225 CMR 20.00 – Solar Massachusetts Renewable Target (“SMART”)

Dear Commissioner Judson,

Nexamp appreciates the opportunity to comment on the Department of Energy Resources’ (DOER) Emergency Regulations, 225 CMR 20.00: Solar Massachusetts Renewable Target (SMART) Program, filed with the Massachusetts Secretary of the Commonwealth on June 5, 2017. The immense workload necessarily undertaken by DOER staff, the Executive Office of Energy and Environmental Affairs (EEA), and Department of Agricultural Resources (MDAR), among others, is evident in the thoroughness of the emergency regulations. Equally apparent is the degree to which stakeholder input – the result of a months-long process of engagement and negotiation – was incorporated into the final program framework. Nexamp is grateful to have been an active participant in that process, and looks forward to the opportunity to offer continued input to DOER – and the DPU – to ensure that the final regulations support the objectives set forth in the enabling legislation and, ultimately, the Baker-Polito Administration’s 1,600 MW solar goal.

As a Massachusetts-based company, Nexamp directly employs over 70 members of the Commonwealth’s impressive solar workforce, in addition to hundreds of additional local contractors and service providers annually. Because Nexamp develops, builds, owns, and operates its solar assets, we bring a distinctive breadth of perspective to the issues facing the C&I and community solar market under SMART. Similarly, we have significant depth of experience in delivering successful projects for property owners, municipalities, and ratepayers across the Bay State over the past decade. To date, Nexamp has installed well over 100 MW in Massachusetts alone, owns and operates over 50 MW of SREC and SREC II assets, and have eagerly awaited the release of the SMART program to advance our substantial pipeline of projects at various stages of development throughout the Commonwealth.

Nexamp generally supports the Joint Solar Industry Comments - submitted collectively by SEIA*, SEBANE*, NECEC*, CCSA*, TASC, MassSolar, EFCA, and Vote Solar - as well as the individual comments of the Coalition for Community Solar Access (CCSA), and we offer the following comments to complement the views expressed by our industry colleagues within those organizations.

A) Competitive Procurement and Base Compensation Rates

For reasons that have been well-documented to date, Nexamp has been generally opposed to the concept of utilizing a single competitive procurement to establish Base Compensation Rates for the entire SMART program. In this mature industry, there is an abundance of data on market costs and appropriate compensation requirements (most notably from DOER's independent consultant report) and no shortage of evidence on the shortcomings of competitive-bid markets.¹

However, we acknowledge and respect DOER's determination that a one-time procurement strikes the appropriate balance of stakeholder feedback. Chief among our concerns has been the potential for an imperfect solicitation process to result in compensation levels that fail to accurately reflect market conditions. More importantly, because *all* project types are subject to the results of a comparably limited competitive procurement, the cascading effect of a below-market clearing price would call into question the viability of the entire market. Therefore, it is critical that the procurement is structured in such a way as to allow for robust participation and, therefore, representative results.

While Nexamp does not necessarily take issue with the basic mechanics of the procurement, as currently structured under 225 CMR 20.07(3)(a), the proposed Ceiling Prices represent a major threat to the SMART program's chances for success. As the SEA analysis – as well as Nexamp's own analysis presented to DOER – clearly shows, the current Ceiling Prices of \$0.15/kWh (for projects between 1 MW and 2 MW) and \$0.14/kWh (for projects between 2 MW and 5 MW) fail to support adequate returns for all but the cheapest of projects in Massachusetts. Notably, the SEA analysis was conducted i) without the assumption of i) Greenfield Subtractors or other new (and potentially costly) performance standards, and ii) exogenous factors, such as the Suniva/SolarWorld trade case, that could slow or reverse declining cost trends within the industry. Just as important to factor in, larger projects are particularly sensitive to the reality of rising interconnection costs in a mature market, which disproportionately impact project economics (as compared to equipment cost declines, e.g.) due to their ineligibility for the federal investment tax credit.

As currently proposed, even in the most optimistic scenario where the Clearing Price equal the Ceiling Prices under the solicitation, the competitive procurement process runs the risk of precluding the participation of otherwise eligible projects (and eager developers) due simply to an unrealistic and unrepresentative price control. Such overly aggressive caps on compensation run counter to the intent of the auction itself – namely, to discover the required market rate of compensation for a given project type (to which all other project types will be indexed based on existing cost data) – and instead promotes the likelihood of non-competitive and unworkable results. Thanks to the Post Selection Requirements, designed to discourage speculative bidding and which we view as critical to the solicitation process, responsible bidders will not (or should not) bid uneconomic projects. In our estimation, therefore, it's very unlikely that the current Ceiling Prices will not support the participation of a full 100 MW of projects, which might otherwise be supported if allowed to bid market rates.

¹ SEA, Developing a Post-1,600 MW Solar Incentive Program: Evaluating Needed Incentive Levels and Potential Policy Alternative (October 11, 2016)

Nexamp strongly supports the suggestion advanced in the Joint Solar Industry Comments regarding a proposed solution for this issue (namely, an increase of the Ceiling Price to at least \$0.175/kWh). It is important to note the asymmetric stakes at play: the consequence of a failed auction is at best disruptive and potentially devastating to the industry; the consequence of an (unlikely) above-market clearing price is self-correcting due the MW block structure of the SMART program itself.

Finally, it is important to note the alignment of the expected timing of the Competitive Procurement with the Suniva trade case currently before the International Trade Commission. As DOER is undoubtedly aware, the result of the trade case could be consequential, with the potential for major impacts on the cost of solar modules. Nexamp expects the ITC to issue a determination on “injury” by late September of this year, to be followed by a recommendation to the President by mid-November, and a subsequent determination of remedy by the President by mid-January, 2018. While Nexamp certainly doesn’t wish to advocate for any further delays to the SMART program, we urge the DOER to consider potential procedural remedies and tariff adjustments should the trade case result in increased costs industry-wide.

B) Adder Caps, Compensation Rate Adder Decline

Nexamp was discouraged to see the inclusion of a seemingly arbitrary hard cap on adders in the emergency regulations. Aside from the necessary revisions to the Ceiling Prices, Nexamp views the removal or modification of the Adder Caps as the top priority for DOER to address in order to ensure the successful continuation of the diverse and enterprising solar industry that has been cultivated in Massachusetts under the SREC program. Please refer directly to the comments of the Joint Solar Industry and CCSA regarding our proposed solution for this issue.

C) Project Segmentation, Land Use, Performance Standards

Project Segmentation:

Under the SREC program, DOER adopted a subdivision rule to prevent potential “gaming” of maximum capacity limit of 6 MW on a single parcel of land, whereby the system owner must demonstrate that “any subdivision recorded after January 1, 2010...was not for the purpose of eligibility in the Solar Carve-out Program.”² The standard has guided development practices in Massachusetts throughout the SREC I and SREC II programs, and was carried over into SMART³. Nexamp fully supports the original limitation, it’s construction and intent, and inclusion SMART. However, Nexamp does not support the additional Project Segmentation restrictions imposed under 225 CMR 20.05(5)(f). In particular, the “contiguous parcel” restriction is overly broad, unnecessarily prohibitive, and would likely result in significant (even if unintended) negative consequences for the market.

² 225 CMR 14.05(4)(a): SREC I; 225 CMR 14.05(9)(a): SREC II

³ 225 CMR 20.05(5)(a): SMART

Generally speaking, Nexamp believes that the subdivision rules that have been in place through the entirety of the SREC program, and which are already well-understood by developers, provide appropriate and sufficient protection against the potential “gaming” of usable parcels under SMART. Further, the practical implications of the new Project Segmentation create several perverse and predictable outcomes. For example, in the case of two or more unrelated entities developing projects on contiguous parcels, it is impractical for any one of the individual parties to ascertain whether another is pursuing a project nearby. It is even less practical to expect that each could reasonably judge the development status of the other throughout the development cycle in an effort to make responsible investments in permitting, legal, engineering, and interconnection costs in the hopes of securing a Statement of Qualification under SMART.

While Nexamp recognizes that DOER may rightly want to inhibit the rare scenario in which a single developer develops several 5 MW projects on contiguous parcels, for example, the proposed Project Segmentation rules present far too blunt an instrument. With developers already well into the process of identifying, engineering, permitting, and evaluating the interconnection requirements for project sites under SMART, the restriction will only add additional complexity, cost, and uncertainty, effectively rendering the development process a crashout. Moreover, the contiguous parcel restriction may very well inhibit optimal system design and interconnection configuration.

It is not clear whether a single Solar Tariff Generation Unit (i.e. generating capacity of 5 MW or less and single point of interconnection) across multiple parcels is allowable under 225 CMR 20.00. One alternative approach, seemingly aligned with the intent of the contiguous parcel restriction, might be to require attestation that the total capacity of Solar Tariff Generating Units seeking a Statement of Qualification by a developer, or its affiliates, in any twelve-month period, on a single parcel or contiguous parcels of land does not exceed 5 MW (AC). At a very minimum, we suggest that Solar Tariff Generation Units that can demonstrate a sufficiently-advanced stage of development at the time of the emergency regulation filing, or effective date of the final regulations, shall not be subject to the Project Segmentation rules.

Nexamp respectfully requests that DOER seriously consider the full range of practical challenges and developmental complications that arise from the introduction of broad Project Segmentation rules as distinct from the existing subdivision standards.

Land Use

Nexamp generally supports DOER’s description of what constitutes “previously developed” land for the purposes of establishing the Land Use Siting Criteria under 225 CMR 20.05(5)(e). However, the current Category 1 Land Use siting criteria for Non-Agricultural Solar Tariff Generation Units carries a seemingly arbitrary requirement that the facility must be on land that is *both* previously developed *and* zoned for commercial or industrial use. In effect, all projects that are located on previously developed land that is not zoned “commercial” or “industrial”, for one reason or another, would be subject to the full Greenfield Subtractor as a Category 3 Land Use Solar Tariff Generation Units. Such treatment would seem contrary to the very intent of Greenfield Subtractors, which was presumably designed to

encourage the development of projects on previously developed land and comparatively discourage “greenfield” development. As importantly, zoning districts and guidelines vary widely across municipalities in Massachusetts, and some jurisdictions have no zoning districts at all. Therefore, Nexamp strongly encourages DOER to clarify that all Solar Tariff Generation Units located on land that has been previously developed will be treated as Category 1 (i.e. not subject to a Greenfield Subtractor). Similarly, and in harmony with those municipalities that have undertaken a public process to establish solar overlay districts or and local zoning that explicitly addresses solar or power generation, DOER should clarify that all such projects shall be treated as Category 1, including those located on land designated as “Prime Agricultural Land” or Land in Agricultural Use (as defined under SMART).

Performance Standards

Under SMART, all ground-mounted Solar Tariff Generation Units with a capacity greater than 500 kW must comply with the performance standards introduced under 225 CMR 20.05(5)(e)5. Therefore, it is critical that these performance standards are defined with a level of specificity necessary to provide functional guidelines for developers, engineers, construction professionals, and financiers. This is especially true if system owners are to be required to produce a post-construction certification that such performance standards were, in fact, met. Simply put, it will be exceedingly difficult to finance and build projects without sufficiently clear and predictable standards of compliance. While Nexamp shares the underlying goal of ensuring responsible and sustainable land use practices, we strongly urge DOER to clarify and/or modify the Performance Standards to address the practical realities of prudent developers:

- a) No stripping of soils: Nexamp expects that this provision is intended to refer only to “off-site removal of existing soils” but clarification is necessary here. Specifically, it is important that DOER confirm that this provision may not be interpreted as a prohibition of on-site grading for construction. Additionally, it is common practice to remove “unsuitable materials”, such as peat or ledge, to be properly disposed off-site, and the option of such best practices should be retained under SMART.
- b) Ballasts or screw-type pilings are required: Generally, Nexamp utilizes screw-type pilings on typical ground-mounted arrays, and *always* utilizes ballasts on landfills, brownfields, and other sensitive sites. However, driven piles are occasionally an optimal solution for certain soil types (non-ledge, non-rocky), often requiring fewer piles and fewer soil penetrations. Because these standard post-driven pilings are temporary in nature, they should be allowed provided that the system owner removes all piles from the soil at the end of the project’s useful life.
- c) ...minimal soils disturbance with displaced soils recovered and returned after trenching completed: Minimal soils disturbance is a reasonable standard for developers generally, but the requirement to re-use as backfill is not prudent. Unless the displaced soils are suitable and comply with typical trench backfill specifications, they should not be returned to the excavation site. Of particular concern, trench backfill for electrical conduits is intended to

protect the conduit with bedding and cover materials, as well as to provide support for vehicular traffic. This condition should be removed or modified to reflect prudent industry/construction practices.

- d) No concrete or asphalt in the mounting area: Nexamp notes that the term “mounting area” is undefined in the regulations. However, a reasonable interpretation of the mounting area as the “footprint” of the solar module area would lead to major concerns with the language as drafted. For example, it is code requirement to install a concrete pad that supports the major electrical equipment such as transformers and inverters, and such equipment is often required to be installed within the module area for design efficiency, among other reasons. Moreover, concrete is quite often used as ballast material for sites where soil penetration is not permitted. DOER should clarify the definition of “mounting area”, and otherwise accommodate the reasonable use of concrete to comply with code and otherwise prudent construction methods. Alternatively, DOER could consider a requirement to remove all concrete as a condition of system decommissioning, rather than an overly broad prohibition.
- e) Address existing soil and water resource concerns that may be impacted: Nexamp notes that this section is both vague and ambiguous. Any existing soil and water issues are subject to the Massachusetts wetlands regulations, which already require the project to meet several performance standards as a condition of approval. Without a clearly conveyed objective, this particular performance standard would seem to be redundant, potentially adding unnecessary complexity and cost to the engineering, development and construction of solar projects in the Commonwealth.
- f) Limited use of geotextile fabrics: This is a reasonable standard, and consistent with good development practice to minimize use of geotextiles and defer to on-site conditions. However, Nexamp notes that many local and state standards will require the addition of geotextiles, and would suggest that DOER clarify that conforming to such standards would not put a project at risk under this section.

Additionally, Nexamp suggests that some of the concerns identified above may be mitigated if the new performance standards are limited to “greenfield” projects (that is, ground-mounted projects, which are not landfills or brownfields, located on previously undeveloped land). Such treatment would seem to be appropriate within the broader context of 225 CMR 20.00 and the stakeholder process leading up to the issuance of the emergency regulations.

Conclusion

Nexamp applauds DOER and the Baker-Polito Administration for their exemplary work in designing a sensible framework to succeed the unequivocally successful SREC II program. As a home-grown company, Nexamp is particularly committed to working with all stakeholders to maintain Massachusetts’ position as a national leader in the development of smart solar policy for all ratepayers, and the creation and retention of meaningful clean energy jobs. By adopting the key recommendations

reflected here and within the broader comments of our industry colleagues, we're confident in the near and long-term prospects for SMART as another innovative model for renewable energy growth coming out of the Commonwealth. We genuinely appreciate your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Murphy". The signature is fluid and cursive, with the first letter "J" being large and prominent.

John Murphy
Vice President, Corporate Development
Nexamp, Inc.