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Mr. Michael Judge
Director, Renewable and Alternative Energy Development
Massachusetts Department of Energy Resources
100 Cambridge Street
Boston, MA 02114

Comment Letter – DOER Declining Block Incentive (DBI) Program – Straw Proposal

Co-Development partners Renewable Energy Massachusetts LLC ("REM") and Syncarpha Capital ("Syncarpha") sincerely appreciate the opportunity to share our comments on the DOER's straw proposal dated September 23, 2016 laying out a preliminary plan for a Declining Block Incentive tariff ("DBI Tariff") program for future solar energy facilities installed in the Commonwealth. REM based in Massachusetts and Syncarpha based in New York together have located, permitted, and now collectively developed over 60 megawatts of ground-mounted solar facilities in the Commonwealth, located on former gravel pits, brownfields and landfills, and industrial sites, and more recently our first community shared solar projects. We believe our collection of projects are precisely what the DOER has asked our industry to deliver. Having worked very diligently since 2009 to bring solar energy to the citizens, companies, and municipalities of Massachusetts, we respectfully request your consideration of our perspective. Thank you for your consideration.

1 Transition Period into the New DBI Program – Extend SREC2

We strongly encourage the DOER to extend the existing SREC2 program to accommodate the expected lengthy transition period before the new DOER DBI Tariff program will take effect, which may not be until September 2017. If this transition gap is not addressed, there are real solar energy projects, jobs, and local economic benefits that will be left stranded and unrealized. Not all solar energy market participants are highly capitalized firms; therefore, many of the key players in the industry today, as a result, are at risk of closing their doors on their employees who live and work in Massachusetts. While we certainly acknowledge that the DOER and DPU must go through their regulatory planning process to yield a long-term solar incentive solution for the years 2017 onward, we are very concerned about the ability of many smaller solar companies to survive. Many of us have invested a great deal of time, energy, and capital to build out the Commonwealth's newly installed solar energy infrastructure. In short, we would encourage the DOER to extend SREC2 right up to the new incentive program effective date, using appropriate emergency regulatory authority to produce a workable transition.

2 Revise the DBI Tariff to Reflect the Impact of Upcoming Cuts to the Federal ITC

As all participants in the solar energy market are acutely aware, the Federal Investment Tax Credit available to commercial facilities is poised to be substantially reduced, from its current 30% level to 26% in 2020, 22% level in 2021 and finally a 10% ITC from 2022-onward. As the SEA consultants to the DOER have indicated in their report, the coming reduction in the ITC will have a material impact on Massachusetts solar financial models in just a few short years from now. (*see*: SEA Study for the DOER Incentive Program, published on the DOER website and dated October 11, 2016 (the "SEA Study"). The solar financial model is highly sensitive to a 20% reduction in the DBI Tariff, especially when combined with a 66% reduction in the Federal ITC. We do not anticipate that these incentive reductions will be matched by similar scale reductions in panel costs and EPC balance of system installation costs, let alone all the other project development costs -- from engineering and permitting, interconnection, labor, insurance and financing costs – that are all subject to non-solar inflationary forces. As a result, we would respectfully encourage the DOER to discontinue the proposed block step reductions in DBI Tariff incentives at the midway point of the new program, i.e., after the fourth block and 800MW of development, when the ITC reduction kicks in. At that point in time, the DOER would be in a position to revisit and return to block step reductions depending upon the modeling facts applicable at the time, from ITC values to all the other model inputs.

3 Open Up QF Facility Size

We would respectfully request that the DOER reconsider its proposed limitation of the maximum size of QF or other non-net metered facilities. The proposed 5MW size limit is arbitrary and we urge the DOER to authorize a maximum 10MW AC facility for QF ground-mounted solar projects, sited in appropriate locations, in order that these projects may realize highly valuable economies of scale, especially in light of overall declining state and federal incentives. We note that stringent ISO-NE interconnection review standards for projects over 5MW AC in size will act as an important practical limitation on actual project scale through increased interconnection, engineering, and financial costs imposed on larger QF projects.

4 Secure DBI Tariff Block Positions

We anticipate significant competition for DBI block positions, and meaningful financial penalties for projects that lose a position in line. Accordingly, in the interest of program consistency and stability, we encourage the DOER to replicate that which has worked well in the past net metering era, namely applying the existing MassACA reservation system in the new DBI Tariff program. Simply, put if a project has (i) a signed interconnection services agreement, (ii) site control, and (iii) all permits other than a building permit, it should be authorized to secure a DBI Tariff block position with a modest per-KW reservation payment and move forward to construction. Otherwise, projects will spend risk capital without knowing whether the expenditure will make economic sense, and this could have a significant and risky, chilling effect on development.

5 Revise Proposed Solar Host Site Restrictions Related to Natural Heritage, Wetlands, Chapter 61, and Prime Agricultural Soils

We ask the DOER to be very careful about the degree to which it prescribes highly restrictive restraints on solar host site locations and, in the process, oversteps the existing boundaries and rule-making processes that are in place to protect local municipal land use considerations in Massachusetts. As a general matter, we note that it is difficult enough to get a site permitted and approved in the Commonwealth to host a solar energy facility. We do not believe the DOER's draft list of "off-limits" sites are appropriate. Collectively these prescriptions would greatly impede utility-scale solar market growth. We note the following are several examples of poorly conceived restraints on the location of solar facilities in the Commonwealth:

a. Sites Appearing on a "Natural Heritage" list – We disagree strongly with the DOER's excessively broad definition of a solar exclusion zone for all sites that are mapped on the Natural Heritage list. The Natural Heritage list serves its purpose today and obligates solar developers, whether commercial/industrial or utility projects, to submit their preliminary plans to the Natural Heritage office for impact screening. Natural Heritage Department's endangered species personnel today already exercise their environmental protection authority to confirm both the accuracy of the endangered species mapping boundaries and, at the same time, whether a proposed solar project will involve a "taking" of an endangered species. The NHESP is a well-functioning review system today and does not need the DOER to impose a heavy-handed exclusion of all solar projects that are proposed to be located on a restricted portion of the state map. Your proposal involves a de facto presumption of solar facilities as a negative, whereas the existing "taking" review process is sufficiently robust that the state has ample opportunity to analyze the specific expected impacts at a particular site.

b. Sites Appearing on Wetlands GIS Maps – We also disagree with what we see as a designated exclusion category of all wetlands areas appearing on state GIS maps. This statewide ban strikes us as an unnecessary intrusion on the existing and effective local wetland regulatory authority of municipal conservation commissions. These local commissions already today provide the effective arenas for regulating where solar facilities may be located and how far set back in relation to wetland resources. The MassDEP likewise today receives notice of all wetland buffer applications through the municipal Notice of Intent (NOI) filing process. As a result, we do not believe there is any warranted extension of these existing regulatory review processes that necessitates the DOER creating a "blanket exclusion" of all projects that are proposed in wetland buffers appearing on the state GIS maps. To make accurate decisions, conservation commissions require that actual existing site conditions be reviewed in the field, not on an on-line map. This is why firms like ours always engage local civil and environmental land use professionals to properly test existing conditions on the ground and work with local conservation commissions to confirm the proper location and setback of solar

facilities from wetland resource areas. In short, the existing wetlands review system works.

c. Chapter 61 Forestry Land – We encourage the DOER to avoid increasing this proposed exclusion zone to incorporate Chapter 61A agricultural lands as well. We note that Chapter 61A – agricultural use - has sufficient local protections in place today that give municipalities a valuable and legal Right of First Refusal (as well as mandatory repayment of back taxes) that are initiated upon any proposed 61A conversion to a non-agricultural use such as solar energy. These are sufficient economic restraints on re-development, such that no blanket exclusion of solar on Chapter 61A lands is necessary.

d. Prime Agricultural Soil Land – We submit that the definition of this proposed exclusion zone strikes us as arbitrarily worded in its preliminary form. We encourage the DOER to very carefully define this new restraint on solar development. We also note parenthetically that ground-mounted solar facilities are readily auger-screw mounted into the soil, and thus are readily removed at the end of a facility's life. If the proposed regulation reflects fears of sub-surface facility remnants and other impacts on soils, we would encourage the DOER to consider more limited solutions, such as prudent regulations of the types of ground-mounted racking systems to be used at such sites.

6 Eliminate Forward Capacity Revenues from Calculation of the DBI Tariff

We encourage the DOER to tread lightly in any attempt to use Forward Capacity revenues as the basis to reduce DBI Tariff incentives for solar QF facilities. Specifically, we note that the SEA Study (*see* section 4.1.3.5 "Generation Capacity and Capacity Reserve Value," at pages 60-64) clearly shows that the grid (and thus ratepayers) receive substantially greater reduction in peak capacity from the aggregated amount of solar deployed to the grid as compared to the modest historic forward capacity payments made to solar generators. Why is there such a disconnect? Because solar facilities have only a 14% capacity factor as calculated on an annual basis, whereas the frequent annual peak hour that sets capacity values and load charges usually occur during summer afternoons, when solar facilities yield substantially more energy than their annual capacity factor. So we ask: Is there any reason to expect that the ISO-NE auctioneers will suddenly reimburse solar facilities more generously? The graphs in the SEA Study show the limited amount of Capacity revenues that any owner of a QF facility could hope to receive from the ISO-NE auction process. Without getting into the specifics of this highly technical topic, we would encourage the DOER to eliminate capacity factor revenues from the DBI Tariff calculus altogether for two reasons: (i) forward capacity revenues are difficult to predict since they vary year to year at auction and (ii) the grid system and load serving entities will continue to receive a disproportionate capacity windfall from solar facilities, as noted above. Parenthetically, we note that eliminating forward capacity revenues from the DBI Tariff calculation would meaningfully reduce future DOER tariff accounting and program administration costs.

7 Incorporate All 41 Municipal Light Plants (MLPs) into the DBI Tariff Program

Historically, the MLPs have gotten what many view as a free pass by being allowed to host solar facilities in their service territories, but without any obligation to fund any portion of the DOER's past SREC incentive systems that in large part financed those MLP-hosted solar facilities. We know this from first-hand experience having developed a 2.5MW project in an MLP territory in Stow, MA. Going forward, the DOER should consider correcting this imbalance by requiring that any MLP that hosts a solar facility in its service territory must pay the solar generation facility the exact same DBI Tariff rate (and for the same term) as all other equivalent-type facilities in Massachusetts. That's just basic fairness and would eliminate the free rider problem with the MLPs. The upside for the MLPs in hosting solar in their territories would continue to be three-fold: (i) they would be free to reimburse solar generators in the out years after the DBI Tariff term at negotiated, no-doubt discounted wholesale-equivalent energy rates; (ii) the MLPs would be able to claim forward capacity and other related benefits; and (iii) the MLPs would be in a position to promote their green energy source to their customers and constituencies. The question is whether any MLP would actually "do the right thing" and host solar in the absence of a legal obligation under Massachusetts law to contract with solar generators for a certain portion of their load. That is a question that the DOER would need to wrestle with, and is beyond this letter's capacity. We do encourage such a requirement as the 41 MLPs have a role to play in our clean energy future.

Thank you for considering our comments and suggestions for improving the design of the DBI Tariff program. Onward to more solar in the Commonwealth -- and soon we hope!

Sincerely,

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