

October 28, 2016



SENT VIA ELECTRONIC MAIL

Department of Energy Resources
100 Cambridge Street Suite 1020
Boston, MA 02114

Introduction

To whom it may concern,

Please find the enclosed comments and market recommendations from SunRaise Investments LLC (SunRaise) on the SREC Successor Program (Program) proposed by the Department of Energy Resources (DOER) in its Next Generation Solar Incentive Straw Proposal presentation delivered on September 23, 2016 (Straw Proposal).

SunRaise is a commercial solar energy financier that works with schools, universities, municipalities and affordable housing properties. SunRaise develops, finances, owns and operates solar energy facilities and sells the output to these entities. The size of the solar facilities that SunRaise develops is typically 500 kilowatts AC and greater.

SunRaise appreciates the opportunity to comment and would like to thank the DOER for its continued stakeholder engagement in this process and its efforts in developing and administering effective solar programs in the Commonwealth.

Term Lengths

Below are the proposed term lengths of each of the capacity based system categories.

System Capacity	Term Length	Recommended Term Length
Less than or equal to 25 kWh AC (Low Income)	10-year	
Less than or equal to 25 kW AC	10-year	
>25 – 250 kW AC	15-year	
>250 – 1,000 kW AC	15-year	20-year
>1,000 – 5,000 kW AC	15- year	20-year

SunRaise is focused on developing and financing solar facilities in the two larger system capacity categories of this table: >250 – 1,000 kW AC (large commercial) and >1,000 – 5,000 kW AC (utility scale). SunRaise has used the proposed capacity based tariff values and specific adder tariff values to financially model 500 kW, 1 MW, 3 MW, and 5 MW AC solar projects under varying scenarios. This financial analysis has made it clear that the proposed Term Lengths will present an issue to the feasibility of financing and developing solar projects of these sizes, which is not the intent of the Program.

With a 15-year term length, the capacity based tariff alone does not allow a project to financially breakeven under achievable installation costs and increasingly high interconnection costs with the utility. Even when including certain illustrative tariff adder values for building mounted (\$0.02) and landfill (\$0.03) installations, the project will only breakeven under very optimistic install costs and reasonable site preparation costs, however, when high costs for interconnection and site preparation are included (which reflects reality) the projects are not financeable.

If the term lengths in these system capacity categories were extended to 20 years it would allow for the financing amortization schedules to extend five more years which, based on the same models, would allow for the monthly and annual minimums to be met that are required by bank and equity providers. This is critical and cannot be understated. Said another way, spreading out the financing costs over a longer period will reduce annual costs of financing and improve the bankability of many projects.

SunRaise would propose that the Term Length of the system in the large commercial and utility scale categories be increased from 15 to 20 years to provide greater financial flexibility to those entities making long term investments in large scale solar projects.

Siting Criteria

In reviewing the siting criteria in Slide 10 of the straw proposal, SunRaise strongly encourages and requests the DOER to modify the siting criteria that were provided in the Program/Straw Proposal. It's important to step back and acknowledge that the Program's intent is to encourage solar development in positive ways that, in this case, utilize the right types of land. If the criteria go unchanged, it will devastate the industry that focuses on systems 250kW and up. Perhaps very clear, improved guidelines could change the Straw Proposal's blanket statements/criteria that prohibit solar on areas like Prime Farmland or Wetlands. However, if that is the case then these guidelines need to be developed soon and should include a greater stakeholder group than just conservation organizations.

SunRaise's co-founder previously worked for The Nature Conservancy and watershed organizations and thus has a unique and valid perspective. These organizations should be aligned with solar development as they are focused on fighting climate change and improving the environment. As it stands, it will be extremely difficult to find sites other than brownfields and landfills, which is not good programmatic siting criteria. Compound this with large interconnection costs and varying town permitting acceptance and the larger-scale solar industry will badly suffer. Improved guidelines would allow for greater flexibility than a rulemaking would, which will be important as new information is made available in the future. Improved guidelines will also not unfairly exclude a specific solar facility from the Program that does not negatively impact a specific area of wetland, farmland, forest land, or the other areas specified.

Farmland

There are many instances where solar facilities can beneficially be sited on farmland. For instance, small, local farms generally struggle financially to sustain operations due to growing competition and increasing globalization. Solar is one form of farming or development that can harmoniously occur on a farm and provide the farmer with additional, stable revenue without compromising the food or crop yield on the rest of the farm. Excluding farmland from this Program will limit the financial opportunity that solar can offer to farmers, and thus remove a key avenue for small farmers to remain viable in an increasingly difficult industry. Local food is critical, and local energy is critical; these two mediums can arguably best be served on the same land parcel. A clear, progressive guideline by the DOER could effectively strike the right balance of solar development on farmland.

MassDEP Wetlands

While SunRaise is generally in support of the idea that the footprint of a solar facility should not cross the border of an area specified as MassDEP Wetlands and agrees that proper setbacks should be followed, parcels of land that have wetlands should not prohibit solar. The guidelines related to wetlands should specify setback requirements and compliance with local conservation commissions. The guidelines should also specify that solar development can occur on a tax parcel that has wetlands on the parcel, so long as the solar footprint does not extend into the wetlands and setback

areas. This is an important contribution to the guidelines as many tax parcels are large and can safely site a solar array without compromising any wetlands on the parcel.

Building Mounted Facilities

The utilization of existing buildings is an intelligent way to site solar facilities as it avoids expanding development into previously undeveloped areas. A building mounted solar facility means that no endangered species, wetlands or forest land will be effected. Additionally, it avoids the complications often associated with landfill or brownfield development that result in Mass DEP intervention and permitting. Site preparation costs can often be high for building mounted systems as re-roofing and structural engineering costs are a significant expenditure. Like interconnection, these costs are unavoidable as the rooftop must be structurally able to site the solar array for as many as 40 years.

Building mounted solar facilities should be incentivized by the DOER at the same level as landfills and brownfields, as it would direct solar development to already suitable areas. It would additionally take into consideration the large site preparation costs associated with building mounted facilities. SunRaise would propose that the tariff adder for building mounted locations be increased to \$0.03/kWh for these reasons.

Changing to four 400 MW blocks

In the straw proposal, the DOER has proposed that there be at least eight 200 MW blocks in the Program. The tariff values would decline by a proposed 5% in each subsequent block. SunRaise would alternatively propose that the size of the blocks be increased to 400 MW and that there simply be at least four blocks as opposed to eight.

Once the Program is made available, the DOER should expect that the first block will be subscribed rather quickly as developers and business will be seeking the higher tariff values, and many projects will be far along in the development cycle in preparation for the Program. While the state has recently been installing solar at a rate of around 300 MW per year, the first 200 MW of this Program will likely be fully subscribed in a shorter timeframe than this current rate of development.

Increasing the blocks to 400 MW will allow the transition to the first block to be much smoother, as all projects that have achieved certain development milestones by the time the Program opens will receive allocation in the first block. In subsequent blocks, the 400 MW will give project developers certainty that the lease and interconnection costs they are incurring early on in development and before they have a block allocation will receive the existing tariff values assumed to cover these costs.

Fewer transitions to lower incentives will additionally alleviate some of the “boom and bust” characteristics that the Massachusetts solar industry has experienced in prior incentive and policy transition. There are many times when development declines or stops over certain periods because of transitions to lower incentives or changing policies. This is far from ideal for the long-term health and stability of the high-wage solar labor force in Massachusetts. Most industries do not have major

stop/go regulations and the solar industry would be grateful to have longer runways with less stop and go.

Extension of SREC II

The DOER likely recognizes that there is a potential situation where the mechanical completion date for SREC II projects warrants extension beyond May 8, 2017.

The implementation of this Program requires DPU intervention to develop and implement tariffs that allocate incentive payments to generators and recover program costs for utilities. The process of this tariff creation through the DPU could potentially add several months to the Program becoming available to generators. The number of parties that are generally involved in tariff creation, including the DPU, utilities and other stakeholder groups, means that following specific timelines is made more difficult by the intervention of many entities with differing opinions. If history repeats itself, there will be delays and postponement.

To minimize the amount of time between May 8, 2017 and the date the Program becomes available and to minimize the material negative impact to the Massachusetts solar industry, the DOER should extend the mechanical completion date for SREC II projects beyond May 8, 2017 since it is very likely that the DPU rulemaking will not complete its role in the Program's development and the Program will not be made available by the Summer of 2017.

Closing

Thank you for the opportunity to provide comments and constructive feedback. It is all with a positive intent and outlook for continuing to reduce our country's reliance on fossil fuels while enabling local jobs and investment that cannot be exported.