

## **2020 APS Minimum Standard Review Stakeholder Questions**

### **November 5, 2020**

Per 225 CMR 16.07(3) the Massachusetts Department of Energy Resources (“DOER”) is required to complete a review of 225 CMR 16.00 Alternative Energy Portfolio Standard (“APS”), including a public comment period, no later than December 31, 2020. The review must include, but is not limited to, an examination of the costs and benefits of the program to ratepayers, an examination of the effectiveness of the program in meeting the energy and environmental goals of the Commonwealth, and an evaluation of whether the Minimum Standard or its rate of increase, as established in 225 CMR 16.07(2), should be adjusted. DOER has taken initial steps to conduct this review by commissioning an independent analysis and report of the APS program completed by Daymark Energy, LLC (“Daymark Report”). In order to supplement the information from the Daymark Report, DOER is opening a public comment period as part of its 2020 APS Minimum Standard Review to seek feedback from stakeholders on the following questions:

1. What are the benefits of the APS program to ratepayers, including but not limited to economic, environmental, and societal benefits?
  - I do not see many benefits in the current program. The main technology it incents today CHP, uses natural gas to produce electricity at a lower efficiency than utility generation and emits harmful gases.
2. What are the costs of the APS program to ratepayers, including but not limited to economic, environmental, and societal costs?
  - A program that is supposed to provide benefits is just adding cost to the ratepayers without benefits to environment or society.
3. Do you believe the APS program should prioritize technologies which provide the most benefits, such as greatest greenhouse gas emissions reductions?
  - Yes
4. From 2015 through the present, what have been the average quarterly Alternative Energy Certificates (AEC) sale prices?
  - No response
5. Is the current APS minimum standard and the annual rate of increase adequate? Please include details and any data supporting why or why not, where possible.

By including CO2 emitting technologies the AEC price is too low to incentivize cleaner technologies. For example, the state between 2010 and 2013 the SREC I program ACP rate was \$550/MWh. There was a calculation at that time as to what it would take to develop clean technologies for Electricity. At the time retail electricity prices were ~\$150/MWh. It was determined that it would take a 4x multiple to incent the investment and financial backing to develop the technology. The effort was very successful and the technology no longer requires incentives to compete against CO2 emitting technologies. In contrast the AEC is currently \$15/MWh or \$0.44/Therm. The current price of nat gas for Rate 07 was \$0.78/Therm. I would have expected that when the SREC I program set pricing they had input from the investment community as to what incentive would be required to attract private investment. Is the same being done for the ACP program to attract investment in clean technologies?

6. Do you anticipate a growth or decline in the supply of AECs in the APS program over the next 5 years? 10 years? If so, how would you quantify this increase in growth rate? Please include details and any data supporting your conclusions.

If the program does not change how it incents global warming emissions I expect AEC

demand will continue to exceed supply. Adding a nat gas CHP is easy to make up any demand short fall. The move to use air source heat pumps for heating will also exceed supply.

7. Are there modifications to the APS program that could be made to reduce the volatility of the APS market?

Reduce the incentive for technologies that emit the greatest Global warming emissions. Simplify the process for cleaner technologies to qualify and determine what multiplier is necessary to bring private investment in these technologies into the market to drive their cost to economically viable levels.

8. Has the APS incentive had an impact on the decision of system owners to invest in APS eligible technologies? Why or why not.

No,

The current program with regards to Solar thermal is cumbersome, and does not easily allow innovation. It is cumbersome that for a significant system to participate they need to line up an aggregator, meter reader/3<sup>rd</sup> party inspector, and the metering technology is narrowly defined to one type of meter. All of which reduce the AEC value. The result is an additional hurdle to introduce solar thermal systems into Massachusetts. In comparison for PV there is a list of qualified metering technologies that allow direct transmittal of data to the aggregators. The California, Maryland, and District of Columbia programs have a list of qualified metering providers, require PE approved performance modeling, and have a Utility program manager that tracks performance to expectation before payment release. These processes are much simpler and lower cost than Massachusetts.

The APS program with respect to Solar Thermal is written to narrowly define traditional technologies. It excludes unglazed collectors. It dis-incentivizes solar space heating and requires an appeal for a new technology to qualify for the program. The leadership Solar thermal technology that was recognized by the AEE 2017 International Innovation award which provided 86% of the homes required space heating is excluded from the APS program because it uses an unglazed collector. For a technology to be successful in Massachusetts it must be capable of addressing space heating. Per the US Energy Information Administration space heating accounts for 59% of residential energy, vs 16% for water heating.

9. How could the APS program be improved to better influence residential or commercial purchasing behaviors?

I believe the AEC needs to prioritize availability to clean technologies that do not emit global warming gasses.

10. Are there currently eligibility criteria in the APS program that you believe are a barrier to participation in the program? How would you address these barriers?

See question 8.

11. What revisions to the existing APS eligibility criteria would you propose to improve and simplify the APS program, if any?

Remove CHP, any type of wood burning, and plants whose sole purpose is to create a biofuel that will emit global warming gasses from the program, for example development of plants that would use waste stock that would otherwise be composted to create bio-fuel. This does not include systems that would capture global warming gasses that would otherwise escape to the atmosphere, for example waste water treatment plant anaerobic digestion or agricultural methane capture.

12. Is there any additional information you believe DOER should consider in its 2020 APS Minimum

## Standard Review?

Responses to the above questions will be accepted until 5pm on December 4, 2020. Please send all responses to Samantha Meserve at [DOER.APS@mass.gov](mailto:DOER.APS@mass.gov) with the subject "2020 APS Minimum Standard Review Comment".

These comments are respectfully submitted by:

Michael Intrieri

SunDrum Solar CEO

(978) 257-2981

[mintrieri@sundrumsolar.com](mailto:mintrieri@sundrumsolar.com)

I am a Massachusetts resident and available for questions or clarifications.