



Massachusetts Department of Energy Resources  
100 Cambridge St # 1020  
Boston, MA 02114  
Re: APS Comments  
via email: [thermal.doer@state.ma.us](mailto:thermal.doer@state.ma.us)  
Attention: Samantha Meserve, E.I.T.  
Program Coordinator at Massachusetts DOER

August 1, 2017

Dear Commissioner Judson, Samantha, and Commission Staff:

We at Steffes appreciate the opportunity to submit comments pertinent to the RPS and APS Statements of Qualification for Generation Units. Our remarks specifically focus on a gap in “Renewable Heating and Cooling” within the Alternative Portfolio Standard (APS) draft regulations to include Renewable Thermal in the Massachusetts Alternative Portfolio Standard (APS) pursuant to [Chapter 251 of the Acts of 2014](#).

We are grateful that Useful Thermal Energy in Massachusetts is already defined as:

*Energy (a) in the form of direct heat, steam, hot water, or other thermal form that is used in production and beneficial measures for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements and (b) for which fuel or electricity would otherwise be consumed.*

<http://www.mass.gov/courts/docs/lib/220-229cmr/225cmr16.pdf>

Our remarks are directed to the current redline of the APS Alternative Generation Attribute and the energy output, or the equivalent of such output as provided in 225 CMR 16.05(1)(a)2.b., 225 CMR to point out the need for an additional to “Renewable Heating and Cooling” in reference to solar hot water.

As noted in the “Eligible APS Renewable Thermal Generation Unit technologies and standards”:

*Solar Thermal. A solar thermal Generation Unit uses flat plate, evacuated tube, or concentrating collectors, to transfer solar irradiation energy to a working fluid, as well as a pump or fan to actively circulate the air, water, or other working fluid through the collectors. Solar thermal collectors must have a performance certification issued by the Solar Rating and Certification Corporation, International Association of Plumbing and Mechanical Officials, or other performance certification approved by the Department. Unglazed flat plate collectors for pool heating are not eligible to qualify as an APS Renewable Thermal Generation Unit.*

We would like to cite remarks made by the Solar Rating & Certification Corporation (ICC-SRCC) in their May 26<sup>th</sup> California Energy Commission submittal TN# 217749:

[http://docketpublic.energy.ca.gov/PublicDocuments/17-BSTD-01/TN217749\\_20170526T121748\\_ICCSRCC\\_Comments\\_on\\_Renewable\\_Water\\_Heating\\_in\\_2019\\_CEC\\_PreRule.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/17-BSTD-01/TN217749_20170526T121748_ICCSRCC_Comments_on_Renewable_Water_Heating_in_2019_CEC_PreRule.pdf)

*The compliance options specified in the proposed ordinance omit an emerging renewable water heating technology that is already available on the market and accepted by the CSI Thermal*



*Incentive Program – photovoltaic (PV) water heaters. These renewable water heaters utilize one or more photovoltaic modules directly connected to an electric water heater with resistive elements. SRCC has incorporated these systems into the [OG-300 Solar Thermal System Certification Program](#). As a result system performance metrics, compatible with those of solar thermal systems, are available. SRCC currently certifies 11 different models of PV water heaters.*

Steffes would also suggest - for your additional consideration - that thermal space heating is moving in that very same direction of utilizing renewable wind and solar energy to also become “renewable thermal”. Although SRCC has not begun to write the protocols for an OG-300 type compliance for renewable thermal space heating, the market is clearly signaling the need for such development.

Thank you again for this opportunity to comment.

Very truly yours,

/s/

Kelly Murphy