



## *Engineering & Utilities*

September 27, 2019

Massachusetts Department of Energy Resources  
Attn: Eric Steltzer  
100 Cambridge Street, Suite 1020  
Boston, MA 02114

--- submitted electronically via DOER.SMART@mass.gov---

### **Re: Straw Proposal for the 400 MW Review of the SMART Program**

Dear Mr. Steltzer:

Thank you for the opportunity to provide feedback on the 400 MW Review of the Smart Program. As a large end user of electricity, a licensed competitive self-supplier in Massachusetts, and an organization with strong commitments to clean energy, the SMART program has many impacts on Harvard University.

**We support the DOER's proposed change requiring the Utilities accept inverter readings as long as the inverters contain revenue grade meters. The change should allow any customer-owned metering technology that meet the ANSI C12.1 accuracy requirements and satisfies the utility communication protocol for all SMART projects.** It would be inconsistent to apply this proposed change only to Solar + Energy storage projects and not all SMART projects. If the proposed metering configuration is satisfactory for Solar + Storage projects, then there is no clear and compelling reason to limit the change to only Solar Tariff Generating Unit (STGU) projects with Storage. In addition to the added costs the redundant production meter imposes on the STGU project, Utility ownership and maintenance of the production meter introduces safety concerns when the solar project is located on a private microgrid not operated by the Utility. The SREC program demonstrated the viability of customer-owned production metering, and by stipulating customer-owned, technology agnostic meter accuracy and certification parameters, there is no insurmountable justification for Utility ownership of the STGU meter.

Numerous examples in other states have already proven the viability of this proposed change. California's Self-Generation Incentive Program, the most widely used subsidy for customer-sited storage, accepts built-in metering data for verifying small-scale storage activity. New York's NY-Sun incentive accepts inverters to track production, as does Pennsylvania's SREC program and Illinois' Adjustable Block Program. ISO New England does not specify separate PV production meters for solar generation enrolled as peak demand resources, rather only minimum accuracy and certification parameters.



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Requiring utilities to utilize data from customer-owned metering equipment is a simple and cost-effective solution for system production reporting that will reduce costs for customers, facilitate energy storage deployment, and increase safety while ensuring that SMART system reporting requirements are compatible with customer and market preferences.

**We also support the proposed change allowing Solar + Storage enrolled in a Demand Response (DR) program to be exempted from the '52 complete cycle equivalents per year' operational requirement.** In stipulating the nature of the demand response program, the cycle requirement exemption should not be limited to exclusively electric distribution company DR programs. For example, many large Commercial and Industrial (C&I) organizations may procure energy from a competitive supplier and reduce their electricity consumption in response to either high wholesale prices or system reliability risks, thereby earning revenue through other DR programs than those administered by the EDC<sup>i</sup>. For these reasons, Solar + Storage STGU projects located at facilities that are retail electricity self-suppliers, interconnected via a microgrid, or similar scenarios should be considered eligible for the 52 cycle DR exemption.

Please contact me at (617) 496-7225 or at [michael\\_macrae@harvard.edu](mailto:michael_macrae@harvard.edu) if you have any questions. Supporting citations available on request.

Sincerely,

Michael Macrae, PhD  
Energy Analytics Manager  
Harvard University Engineering & Utilities

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<sup>i</sup> "Demand Response is a program through which customers reduce their electricity consumption in response to either high wholesale prices or system reliability risks. Demand Response customers are paid for performance based on wholesale market prices. The ISO New England regional grid operator administers this program."  
<https://www.mass.gov/service-details/demand-response-load-management>