



June 29, 2020

Sent via electronic correspondence to doer.smart@mass.gov

Kaitlyn Kelly
Massachusetts Department of Energy Resources
100 Cambridge Street, 10th Floor
Boston, MA 02114

RE: Comments on the Guideline on Metering of Solar and Energy Storage Systems

Dear Ms. Kelly,

ENGIE North America Inc., appreciates the opportunity to provide comments on the Solar Massachusetts Renewable Target's Guideline on Metering of Solar and Energy Storage systems released by the Department of Energy Resources on May 18, 2020. Enclosed are ENGIE's comments and recommendations for your consideration.

Sincerely,

/s/ Sarah Bresolin Silver

Sarah Bresolin Silver
Director, Government and Regulatory Affairs
Engie North America, Inc.

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**RECOMMENDATIONS OF ENGIE NORTH AMERICA INC.
ON THE GUIDELINE ON METERING OF SOLAR
AND ENERGY STORAGE SYSTEMS
JUNE 29, 2020**

I. Introduction

ENGIE North America LLC (“ENGIE”) appreciates the opportunity to provide comments to the Department of Energy Resources (“Department”) on the Solar Massachusetts Renewable Target (“SMART”) program Guideline on Metering of Solar and Energy Storage Systems (“Metering Guideline”) issued on May 18, 2020. Metering and settlement of solar-plus-storage systems is highly complex and is essential to their successful participation in Massachusetts the SMART program.

ENGIE SA is a global energy services company and the world’s largest provider of energy and energy-efficiency services. ENGIE is uniquely positioned to comment on the Metering Guidelines given its active engagement in shaping the SMART program as well as its leading role on DC metering issues before the Department, the Department of Public Utilities (“DPU”) and the Independent System Operator for New England (“ISO-NE”). ENGIE’s distributed renewables team is a national leader in the deployment of distributed energy storage systems (“ESS”) for both behind-the-meter and front-of-the-meter applications and is currently developing over 50 megawatts (“MW”) of energy storage and 76 MW AC of solar photovoltaic (“PV”) in Massachusetts through the SMART program alone (“SMART Projects”). ENGIE’s SMART Projects will also participate in the region’s wholesale energy markets administered by ISO-NE.

ENGIE appreciates that the Department recognizes the importance of metering to the SMART program and has issued the Metering Guideline to capture certain of the important



aspects of metering under the SMART program. Regrettably, recommendations made by Eversource, National Grid and Unitil (“Joint EDC Comments”) related to the Metering Guideline in their comments on the SMART Emergency Regulation, if adopted by the Department, will walk back over a year of negotiations between SMART project developers and the electric distribution companies (“EDC”). Certain of these negotiations are being overseen by the Department and attended by ISO-NE staff with the goal of permitting the successful participation of DC coupled solar-plus-storage projects in the SMART program.

To ensure that the projects built pursuant to the SMART program come online successfully, ENGIE recommends that in the Metering Guideline the Department: (1) maintain the option for customers to own their own meters, particularly DC meters (2) explicitly provide for customer or third party reading and verification of customer-owned meters (3) incorporate the Department-led consensus-based round trip efficiency (“RTE”) true up calculation, and (4) clarify acceptable meter configurations and settlement for SMART solar-plus-storage projects.

II. Comments on the Metering Guideline

- a. Customer-ownership of DC meters is crucial to system design and project operation and should be maintained.*

ENGIE supports the Metering Guideline’s memorialization of customer ownership of DC meters and requests that this vital aspect of the Guideline be retained. It is essential that project owners maintain the ability to own the DC meters in SMART systems for several reasons. First, the question of EDC ownership of DC meters was explicitly discussed between SMART developers, EDCs and the Department during the ongoing stakeholder process for the



round-trip efficiency (“RTE”) true up calculation (“Stakeholder Process”).¹ During this process EDC ownership of DC meters was determined infeasible by all parties to the discussion. Revisiting this determination now will expose SMART projects and the SMART program’s implementation to further unnecessary and unwarranted delays.

On several occasions during the Department’s stakeholder process, the EDCs stated that they did not want to own or operate DC meters. Since, in their comments to the Department on the Metering Guideline, the EDCs are requesting that the Department prohibit customer-owned metering, the EDCs are by implication requesting that the Department prohibit all DC-coupled solar-plus-storage systems from participating in the SMART program. Not only would this reverse and nullify the last year of negotiations relating to DC-metering of SMART projects, it would have severe economic impacts on these projects and put the success of the SMART program in jeopardy.

Even if the EDCs wanted or were able to own, install and operate DC meters, the EDCs have indicated their metering departments are not equipped to handle DC meters. The EDCs have informed SMART developers and the Department that they do not have the necessary methods to read DC metering data into their settlement systems. Also, the essential placement of DC meters on the DC side of the inverter would necessarily conflict with the unwillingness the EDCs have shown in installing or reading metering equipment on the customer side of the point of common coupling.

¹ At the DPU’s September 11, 2019 meeting the DPU directed the Department to continue to oversee ongoing negotiations related to the calculation of a RTE true up calculation for DC-coupled solar-plus-storage systems participating in the SMART program. SMART developers, EDCs, ISO-NE staff and the Department met bi-weekly over several months and came to an agreement on how the true up should be calculated.



Customer ownership of DC meters is crucial to basic system design and operation. Because of the reasons laid out above, it is pertinent that customers retain the ability to own their meters.

b. The Metering Guideline should explicitly provide for customer or third-party meter reading and verification of customer-owned meters.

The Department should allow project owners and operators to read and report their own meter data for settlement purposes under the SMART program. Many project owners and operators maintain this ability internally and follow this practice in other jurisdictions and programs. Where a project owner or operator does not have the capability internally, there are several companies that perform third party meter reading and verification services.

If third party verification is used, ENGIE does not anticipate delays in incentive payments due to third party verification as third party verifiers automatically report the data to the appropriate regulatory or oversight body. Third party verification of meter data is a routine service provided internally or externally by experienced companies dedicated to providing the service and is not an adequate reason for removing from customers the ability to own their own meters.

ENGIE recommends further that the Metering Guidelines make explicit the ability of project owners and operators or third parties to read meters and verify meter data. Given that the EDCs have consistently expressed an unwillingness to own, operate or read DC meters, if DC meters are to be read, they must necessarily be read by the project owner or operator, or a third party.



This circumstance is not without precedence. The ISO-NE Open Access Transmission Tariff (“Tariff”) permits the project to assign a meter reader that is not the Host Participation (Transmission Owner). This allows the project owner, often the developer, to act as the Assigned Meter Reader. Under the Tariff the Assigned Meter Reader is required to report to ISO-NE the hourly and monthly MWh associated with the resource and used for settlement.² The Assigned Meter Reader may even designate an agent to help fulfill the Assigned Meter Reader’s responsibilities. In this latter case, the Assigned Meter Reader remains responsible to ISO-NE. Given that the non-EDC owned meter reading construct exists at ISO-NE, the Department should take comfort from ISO-NE’s acceptance of third-party meter reading and permit the practice. ENGIE recommends that the Department amend the Metering Guideline to explicitly state that project owners and operators as well as third parties are permitted to read and verify meter data. Codifying this ability will provide for administrative efficiency and clarity.

c. The Department should include the Department-led consensus-based RTE true up calculation in the Metering Guideline.

ENGIE continues to strongly support the Department’s efforts related to the ongoing stakeholder process between developers, EDCs, the Department and ISO-NE to provide compensation to SMART projects for battery round trip efficiency losses and to ensure an equal playing field for DC-coupled systems and AC-coupled systems. Neither the Emergency

² ISO New England, Open Access Transmission Tariff, Section I – General Terms and Conditions, available at https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_1/sect_i.pdf.



Regulations nor any of the guidelines fully address the round trip efficiency true up calculation and appropriate compensation.

ENGIE thanks the Department for leading the RTE calculation meetings and recommends that the Department capture the consensus driven RTE calculation agreed to in December 2019 in the Metering Guideline – or another guideline if appropriate. The calculation was agreed to following a number of public meetings consisting of numerous developers, as well as EDCs and staff from ISO-NE and the Department. Alternatively, ENGIE requests that the Department indicate to the DPU that the EDC’s SMART Tariffs should include compensation for RTE losses based on calculations using DC-metered values for DC-coupled solar-plus-storage systems.

d. The Department should clarify and finalize acceptable metering configurations and settlement for SMART projects.

As developers are beginning to finalize the construction and interconnection activities and SMART projects are starting to come online, the lack of regulatory clarity in the SMART regulations and EDCs’ tariffs and stakeholder agreement on metering and settlement for SMART solar-plus-storage projects’ incentive payments and the Alternative On-Bill Credits (“AOBC”) payments is becoming increasingly pronounced and raises serious concerns about the success of the SMART program. Department guidance in the Metering Guideline – or other Guideline – that standardizes metering and settlement requirements will provide a clear and consistent path forward not only for the SMART projects already under construction, but for meeting the storage pairing requirement in the updated SMART program. Such guidance



should address which meter is used to settle each of the payment streams so that SMART project developers and investors have confidence regarding program revenues.

ENGIE has drafted and previewed with the Department proposed optional metering configurations for AC and DC coupled solar-plus-storage systems under the SMART program, with and without wholesale market participation, that we believe are the best solutions to clarify and ensure compliance with the EDC's SMART Tariffs and regulations, preserve the policy intention behind the SMART program, and enable storage participation in the ISO-NE markets. ENGIE recommends that the Department develop additional guidance to address these concerns which are central to the SMART program and issue the Guideline for public comment.

III. Conclusion

Thank you for the Department's consideration of these comments. ENGIE appreciates the time and effort the Department has devoted to ensuring the success of the SMART program. ENGIE is committed to the success of both the program and to assisting the Commonwealth of Massachusetts achieve its clean energy objectives. ENGIE looks forward to continuing to work with the Department and all stakeholders as the SMART program matures. Please do not hesitate to reach out to me with any follow-up questions or for additional information.

Respectfully submitted,

/s/ Sarah Bresolin Silver

Sarah Bresolin Silver
Director, Government and Regulatory Affairs
ENGIE North America Inc.