

July 7, 2015

#### VIA ELECTRONIC MAIL

Honorable Kathleen H. Burgess Secretary New York State Public Service Commission Three Empire State Plaza, 19<sup>th</sup> Floor Albany, New York 12223-1350

**RE:** Case 14-M-0101 – Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision (REV)

### **ERRATUM FILING - PROPOSED REV DEMONSTRATION PROJECTS**

Dear Secretary Burgess:

I am writing in connection with the Proposed REV Demonstration Projects filed by Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid") on July 1, 2015 in the subject proceeding pursuant to the Memorandum and Resolution on Demonstration Projects issued by the Commission on December 12, 2014 and the Order Adopting Regulatory Policy Framework and Implementation Plan issued by the Commission on February 26, 2015. It has come to the attention of National Grid that pages 25, 27 and 28 of the filing overstated the NY-Sun incentive currently available for upstate region residential customers. National Grid has corrected those pages to reflect the incentive currently available under NY-Sun Incentive Block 5. Accordingly, please remove and discard the aforementioned pages of the Proposed REV Demonstration Projects and replace with the enclosed pages marked "Revised July 7, 2015."

Thank you for your attention to this matter.

Respectfully submitted,

/s/ Janet M. Audunson

Janet M. Audunson, P.E., Esq. Senior Counsel II

Enc.

cc: Tammy Mitchell, DPS Staff, w/enclosure (via electronic mail)

Marco Padula, DPS Staff, w/enclosure (via electronic mail)

Denise Gerbsch, DPS Staff, w/enclosure (via electronic mail)

Edward White, w/enclosure (via electronic mail)

Philip Austen, w/enclosure (via electronic mail)

Cathy Hughto-Delzer, w/enclosure (via electronic mail)



#### Investments

The program budget for this demonstration project makes the following budgetary assumptions:

- Within the community boundary, 100 residential rooftops suitable to host solar PV arrays be identified and secured for the project.
- A subset of the 100 residential rooftops suitable for solar PV may require repairs. A portion of the project budget has been allocated to address this potential barrier to customer participation.
- The expected asset life of all equipment for the program (PV module, micro-inverter, and mounting system) is 25 years.
- All rooftop units will be installed by certified roofers.
- All installations will qualify for the Federal 30% investment Tax Credit ("ITC"), as the Emergency Economic Stabilization Act of 2008 (EESA) extended the 30% ITC to investor-owned utilities. Prior to EESA, public utilities were not eligible for ITC benefits.<sup>1</sup>
- All installations will qualify for NYSERDA's \$0.60/watt certified installation rebate for Upstate residential customers, assuming there is no sunset date prior to the commencement of the program.<sup>2</sup>
- National Grid's Billing & Systems Department will perform the necessary Customer Service System ("CSS") rider or special contract to isolate and manually credit the totalized generation revenue to electric customers within the demonstration project's boundary.
- Given the innovative nature of this solar PV model, there are R&D benefits to be gained by modeling the electric distribution system post-installation.

Using the GE/NYSERDA 5 kW micro-inverter system in Figure 8 that is currently being demonstrated at National Grid's Henry Clay Boulevard facility in Syracuse, New York to inform the estimated total cost of this program, Tables 4, 5, and 6 below list the equipment and installation costs, total tax incentives, and total out-of-pocket costs per solar PV unit as well as for all 100 solar PV units specified for the demonstration project. It should be noted that given the "plug and play" nature of this proposal, an alternative, solar PV unit could be utilized in place of the GE/NYSERDA 5kW micro-inverter system.

Lastly, Table 7 provides the estimated Total Projected Project Cost and estimated Total Out-of-Pocket Project Cost with incentives included. One-time development costs are indicated with a "\*"

<sup>2</sup> The current, open NY Sun Incentive Block 5 for Upstate Region Residential customers is \$0.60/W. The amount of this incentive is subject to change once the current incentive block is fully allocated (e.g., NY Sun Incentive Block 4 is \$0.50/W). See NY Sun Initiative Dashboard: <a href="https://www.powerclerk.com/nysuninitiative/dashboard.aspx">https://www.powerclerk.com/nysuninitiative/dashboard.aspx</a>

<sup>&</sup>lt;sup>1</sup> Michael Mendelsohn and Claire Kreycik, National Renewable Engineering Laboratory, "Federal and State Structures to Support Financing Utility-Scale Solar Projects and the Business Models Designed to Utilize Them." <a href="http://www.nrel.gov/docs/fy12osti/48685.pdf">http://www.nrel.gov/docs/fy12osti/48685.pdf</a>, pg.2.



Pre-Installation Costs (per unit, total for #100 units)		
Structure & Design Engineering	\$2,000.00	\$200,000.00
Overhead (insurance, NYS filing fees, incorporation, etc.)	\$700.00	\$70,000.00
Permitting	\$250.00	\$25,000.00
Equipment-related Costs (per unit, total for #100 units)		
Per unit cost (including PV Module, micro-inverter, and mounting system)	\$14,000.00	\$1,400,000.00
Transportation	\$750.00	\$75,000.00
2nd meter & channel to separately measure solar generation (single phase meter)	\$100.00	\$10,000.00
Installation expense (includes meter set for 2nd meter)	\$7,425.00	\$742,500.00
TOTAL	\$25,275.00	\$2,527,500.00

**Table 1: Estimated Equipment and Installation Costs** 

Tax Incentives (per unit, total for #100 units)		
NYSERDA Rebate @ \$0.60/W	\$4,209.00	\$420,900.00
30% Federal ITC	\$7,155.84	\$715,584.00
TOTAL	\$11,364.84	\$1,136,484.00

**Table 2: Tax Incentives** 

Total Out-of-Pocket Cost (per unit, total for #100 units)				
Total Equipment & Installation Cost	\$25,275.00	\$2,527,500.00		
Total Tax Incentives	\$11,364.84	\$1,136,484.00		
TOTAL	\$13,910.16	\$1,391,016.00		

**Table 3: Estimated Total Out-of-Pocket Costs** 



Total Upfront and Out-of-Pocket Program Costs		
Total Equipment & Installation Cost	\$2,527,500.00	
Comprehensive Home Energy Audit Screenings and Home Energy Health & Safety Measures (for 300 customer participant pool)	\$300,000.00	
Initial Minor Roofing Repairs and Electric Panel Replacements (for 100 host sites)	\$200,000.00	
Roofing Repairs for 25-yr. Life of Assets	\$50,000.00	
Community Education	\$250,000.00	
Development of Micro-inverter Wi-Fi Communication System to Optimize Dispatch Signals & Efficiency of Feeder	\$225,000.00*	
Modeling of the Distribution System Post-Installation	\$100,000.00*	
Billing/Credit Rider Enhancement	\$81,000.00*	
O&M (\$15,000.00/year for 2 years of the Demonstration)	\$30,000.00	
TOTAL UPFRONT PROJECT COSTS	\$3,763,500.00	
TOTAL TAX INCENTIVES	\$1,136,484.00	
TOTAL OUT-OF-POCKET PROJECT COSTS	\$2,627,016.00	

**Table 1: Estimated Total Upfront and Out-of-Pocket Program Costs** 

#### **Returns & Cost Effectiveness**

The demonstration project seeks reasonable returns in terms of positive customer arrears impacts and greater electric grid efficiency.

# Reporting

## Information to be Included in Quarterly Reports to the Commission

Quarterly progress reports on the stakeholder and business model work will be provided to the Department of Public Service ("DPS") Staff. These reports will include at a minimum an overview of project progress against timeline/plan and results as they become available. Additionally, in order to maintain flexibility and maximize the potential for innovation and learning the reports may contain other updates or deviations from the initial details provided in this filing. To further ensure alignment, the Company would also like to meet with DPS Staff to discuss the quarterly progress reports. Any changes related to costs shall remain within the overall revenue requirement cap. Furthermore, as highlighted in the DPS letter dated June 24, 2015, should a situation or activity arise that is not authorized by the Commission the Company would include a description in the quarterly report and request such authorization through a petition to the Commission. Lastly, the Company looks forward to continued collaboration with DPS beyond the formal quarterly reports.

<sup>&</sup>lt;sup>1</sup> Letter from Tammy Mitchell and Marco Padula, New York State Department of Public Service Staff, to Utility REV Demonstration Project Representatives (June 24, 2015).