



**Distributed Generation Interconnection  
REV Demonstration Project  
Case 14-M-0101**

**Quarterly Report – Q1 2018**

**April 30, 2018**

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## 1.0 Executive Summary

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On February 14, 2017, Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”) filed a proposal for the Distributed Generation Interconnection REV Demonstration Project (the “Project”) in Case 14-M-0101.<sup>1</sup> The Project is designed to test alternative solutions for increasing the pace and scale of interconnecting distributed generation (“DG”) systems above 50 kW through upfront investments by the Company coupled with a cost-allocation methodology aimed at removing barriers for DG interconnection applicants. The Company proposed to test these solutions at two of its substations, Peterboro and East Golah (the “Demonstration Areas”). By letter dated April 24, 2017, New York State Department of Public Service Staff (“DPS Staff”) approved the Project with modification, and directed the Company to file an implementation plan, which the Company subsequently filed on May 24, 2017 (the “Implementation Plan”). The Company constructed common upgrades at each substation sufficient to accommodate additional DG interconnections, and marketed the increased capacity at those substations to DG developers. There are now enough pending DG interconnection applications in the queue to fully subscribe the available transformer bank capacity created by the common upgrades. The purpose of this quarterly report is to provide an update of Project closeout activities before the term of the Project ends in June 2018.

## 2.0 Highlights Since Previous Quarter

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### 2.1 Major Task Activities

The Project is proceeding on schedule. Below are Project milestones included in the Implementation Plan updated to include changes and adjustments reflected in the Q4 report and this report, as well as the current status of each milestone.

General Project Milestones		
Date	Milestone	Status
March 2017	Begin general outreach	Completed
April 2017	Provide funding numbers	Completed
	Begin marketing the Project	Completed
May 2017	Order long-term materials	Completed
	Develop cost per kW	Completed
August 2017	Begin site-specific outreach to developers	Completed
October 2017	Mapping Portal (feeder)	Completed
	Design Developer Survey	Completed
January 2018	Email survey to DG developers	Completed February 2018

<sup>1</sup> Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* (“REV Proceeding”), “Proposed Distributed Generation Interconnection REV Demonstration Project” (filed February 14, 2017).

	Complete remote net metering and billing adjustments	Completed
February 2018	Informational meetings with local officials in Demonstration Areas	Ongoing
June 2018	Email Second survey to DG developers	Scheduled for June 2018
	The Project term ends	
<b>Peterboro Substation Milestones</b>		
<b>Date</b>	<b>Milestone</b>	<b>Status</b>
February 2017	Complete initial cost estimate	Completed
July 2017	Complete 3V <sub>0</sub> design and engineering	Completed
	Determine needs for switching and/or mobile substation	Completed
September 2017	Schedule civil work	Completed
	Schedule electrical work	Completed
November 2017	Schedule relay work	Completed
December 2017	Construction completion	Completed
June 2018	Project term ends	
<b>East Golah Substation Milestones</b>		
<b>Date</b>	<b>Milestone</b>	<b>Status</b>
February 2017	Complete initial cost estimate	Completed
June 2017	Determine needs for switching and/or mobile sub	Completed August 2017
August 2017	Complete 3V <sub>0</sub> design and engineering	Completed
	Schedule civil work	Completed September 2017
	Schedule electrical work	Completed
October 2017	Schedule relay work	Completed
December 2017	Construction completion	Completed November 2017
June 2018	Project term ends	

On February 27, 2018, National Grid presented the Project to developers as part of the Interconnection Policy Working Group (“IPWG”). The developers responded positively to the alternative cost-allocation solution; noting, specifically, that it removes the initial cost burden on the first applicant in the queue, provides certainty, and facilitates faster interconnections. The Company also completed the feeder-level mapping portal in the last quarter. The portal helped DG developers identify interconnection locations that are: 1) well-suited for the proposed facilities; and 2) unlikely to significantly impact the Company’s distribution system. What’s more, the feeder-level mapping data proved sufficient to attract a sufficient number of applications in the Demonstration Areas that the Company determined further work on a second land-use portal was unnecessary at this time. The Company also completed as-built drawings for

the Project and continues to work on the reconciliation process for both the East Golah and Peterboro substations.

During the first quarter of 2018, National Grid also began surveying DG developers to gather feedback on their level of interest in interconnecting DG, as well as barriers that may prevent them from pursuing projects. As indicated by the initial survey results, which are included here as Appendix 1, as well as the full subscription of each substation following the common upgrades, the DG developers were interested in the Project. The Company, consistent with the Implementation Plan, also adjusted its billing for DG applicants based on the specifics of their respective projects – including billing adjustments for remote net metering volumetric logic automation in July 2017 and remote net metering monetary and community logic automation in March 2018.

## 2.2 Challenges, Changes, and Lessons Learned

The table below lists the challenges, changes, and lessons learned since submittal of the Implementation Plan.

2017	Issue or Change	Resulting Change to Project Scope/Timeline?	Strategies to Resolve	Lessons Learned
Q3	Mapping Portal	The Company developed a mapping portal to assist developers seeking to interconnect in the Demonstration Areas by providing feeder-level information.	The feeder portion of the portal was completed and available to developers. The land-use portion of the portal was deemed unnecessary due to the number of applications received.	Additional information and tools may facilitate interconnections.
Q3	Survey Implementation and feedback		Review the evaluation survey to gather feedback from developers who chose to locate DG projects in Demonstration Areas, as well as those who chose	Create a new strategy to help overcome barriers to DG development.

			not to.	
.Q4	Disseminate information about the Project to a broader audience.	Additional efforts to engage with developers regarding the Project.	<p>Hosted a webinar in December and participated in NYSERDA call, providing additional information and facilitating interconnections in the Demonstration Areas.</p> <p>Continued in-person meetings with local officials in the Demonstration Areas.</p>	The Company is seeking new and innovative opportunities to make the developer community aware of the Project and its potential benefits.
<b>2018</b>	<b>Issue or Change</b>	<b>Resulting Change to Project Scope/Timeline?</b>	<b>Strategies to Resolve</b>	<b>Lessons Learned</b>
Q1	Disseminate information about the Project to a broader audience.	Continue additional efforts to engage with developers regarding the Project.	The Company presented to DG developers during an IPWG meeting, and is continuing outreach to local officials.	

### 3.0 Next Quarter Forecast

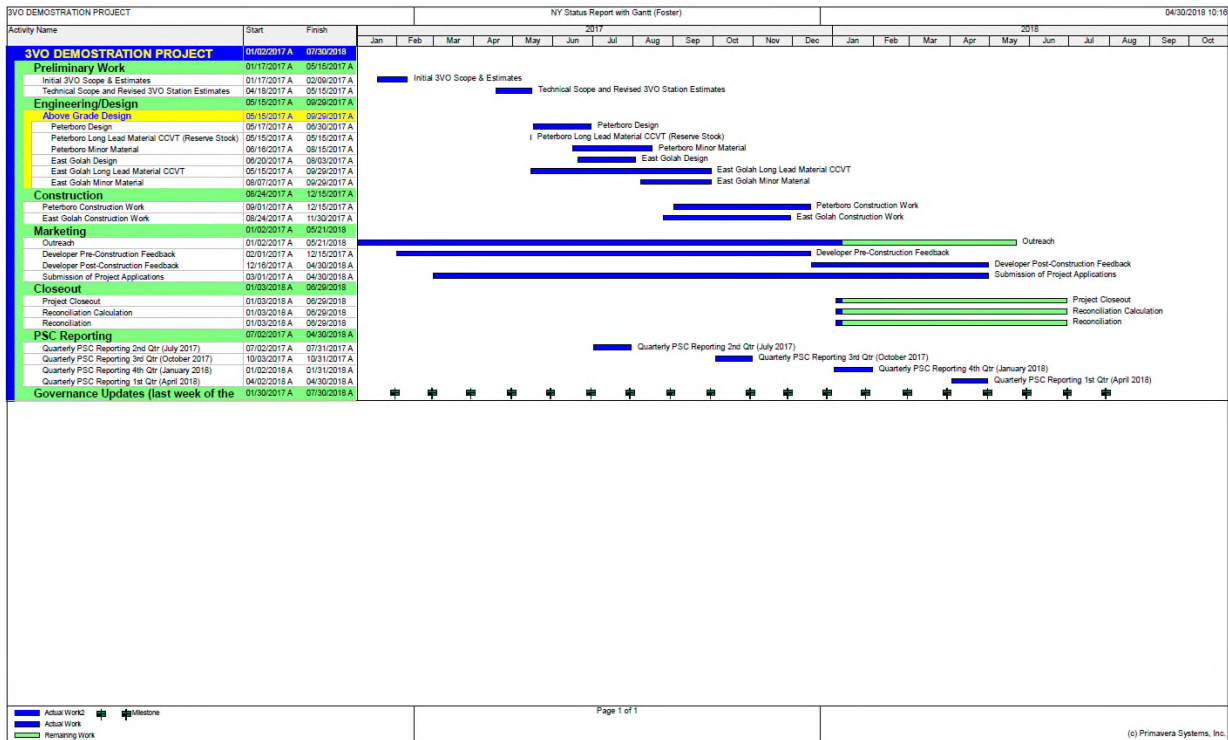
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The Project term ends next quarter. During this final quarter, the Company will engage in Project closeout activities. This includes continuing to review the DG applications in the queue at each substation, issuing a second survey to developers in mid-June 2018, and continuing in-person meetings with local officials to provide information about the Project and develop a better understanding of local ordinances and permitting requirements. A revised schedule is provided in Section 4.0.

## 4.0 Work Plan and Budget Review

### 4.1 Updated Work Plan

Please refer to the updated Gantt chart below.



### 4.2 Current Budget

A Current budget is provided in the table below.

Project Task	1 <sup>st</sup> Quarter 2018 Actual Spend	Project Total Spend to Date	Project Current Budget	Remaining Balance
<b>CapEx</b>				
Engineering, Material and Construction	\$5,000	\$1,122,000	\$1,237,100	\$115,100
In Service Liabilities & Closeout	\$42,039	\$206,573	\$228,700	\$22,127
<b>OpEx</b>				
Marketing	\$ 4,500	\$ 4,500	\$20,000	\$ 15,500
<b>Total</b>	<b>\$51,539</b>	<b>\$1,333,073</b>	<b>\$1,485,800</b>	<b>\$152,727</b>

## 5.0 Quarterly Report Template

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The quarterly report template is provided below.

Quarterly Report Template	
<b>Milestones:</b>	
Last Project Milestone:	Construction completed. Initial Survey completed
Next Project Milestone:	Project closeout
<b>Tasks/Timeline:</b>	
Completed Project Tasks Since Last Quarterly Report:	Completion of as-built drawings
Changes or Impacts to Schedule Since Last Quarterly Report:	No changes
Lessons Learned:	Project plan resulted in sufficient DG interconnection applications to fully subscribe both substations
<b>Risks:</b>	
Identified Risks:	
Risk Mitigation Plan:	
<b>Finance:</b>	
Total Spend to Date:	\$1,333,073
Forecast Spend:	\$1,485,800
<b>Queue Status Update:</b>	
East Golah	<p>One project in construction for Solar City.</p> <p>Four projects from Solar Park Energy in Coordinated Electric System Impact Review (“CESIR”) study.</p> <p>Two projects, one from Forefront Power LLC and the other from Cypress Creek in preliminary study.</p>



<p>Peterboro</p>	<p>One agreement from CNY Solar.</p> <p>Two projects from Solar Park Energy in CESIR study.</p> <p>One project from High Peak Solar/Sycaway in preliminary study.</p> <p>Three projects, one from OYA Solar, and two from Nexamp in application status.</p>
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## Appendix 1

National Grid Distributed Generation Interconnection REV  
Demonstration Project – Initial Summary of Survey Results

### Initial Survey Results Brief

- Survey start date : 1/12/2018
- Survey end date : 2/2/18 (including two extensions with reminders)
- Response rate: 14.5%
- 17 of the 23 respondents were familiar with the Project.
- Of the six who were not familiar, one dropped out of the survey and the remaining five were all interested.
- Of the 17 who were familiar with the Project, one dropped out of the survey and nine (56%) were satisfied, five (31%) were neither satisfied nor dissatisfied, and two (13%) dissatisfied with the Project.
- Predictable costs were most important to the developers.
- Of the remaining 14 who were familiar with the Project, none have submitted an application; four decided not to submit an application, finding affordable land was the largest issue; ten have not yet decided, finding accessible land was the largest issue to moving forward.

### Post-Survey Solar Interconnection Application Activity:

- East Golah Substation: Eight total applications received between 2/3/18 and 4/5/18.
- Peterboro Substation: Five total applications received between 2/21/18 and 4/10/18.