

June 3, 2016

**VIA ELECTRONIC MAIL**

Michael Worden  
Deputy Director - Electric  
New York State Department of Public Service  
Three Empire State Plaza  
Albany, New York 12223-1350

**RE: Distributed Generation (DG) Interconnections of Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid”)**

Dear Deputy Director Worden:

Thank you for meeting with Terry and me on Thursday, May 20, 2016, to discuss concerns related to National Grid’s DG Interconnections process. While the Company is fully up to speed on the sensitivity and urgency with respect to this subject, it was extremely important for us to hear your perspectives first hand. The actions required of National Grid are crystal clear around commitment, communication, and mitigating the study backlog. We are hopeful that we were able to demonstrate that we are committed to making significant improvements and have the appropriate plans to see this through. We are enhancing our developer communications and negotiations as we write and will provide an update later in June.

In order to demonstrate National Grid’s commitment to making significant improvements, we propose the following for your consideration to measure and track all phases of the DG interconnections study process. National Grid will continue to provide you with weekly reports consistent with the practice of all the utilities. In addition, we offer frequent face-to-face updates at a mutually agreeable pace. National Grid is committing to mitigating the backlog in all phases of the DG interconnection study process by July 29, 2016 and to maintain the following attainment rates post-July 29, 2016:

<b>Study Phase</b>	<b>Descriptor</b>	<b>Attainment</b>
1	Application accepted	100%
2	Preliminary Analysis delivered	100%
3a	Supplemental Review delivered	100%
3b	Final CESIR delivered	100%

For Active Projects within Any of the Above Study Phases:

The attainment rate would exclude those studies on “Customer Hold” as identified in the SIR process and would additionally exclude projects with extraordinary complexities. Customer Hold is described as 1) a request of information by the utility to the customer to complete a review or study where the delay in providing the necessary information by the customer is greater than one day or 2) a project where a study has been authorized by the customer and in the beginning course of the review the utility finds substantial system upgrades, notifies the customer of significant costs and schedule where the customer requires time to make a decision on whether to proceed further. If the direction to proceed from the customer is greater than one day, it is a Customer Hold. Customer Hold durations will be added to the original due date for calculation purposes and projects where Customer Hold durations have exceeded 20 business days, the start date will be reset. For projects with extraordinary complexities, it is incumbent on the applicant or National Grid to put the other party on notice that there are extraordinary circumstances in play that could impact the study schedule. Upon such notification, National Grid will escalate the issue to its Ombudsman for the purpose of engaging the applicant and reaching mutual agreement on a study completion date. National Grid will seek to limit the number of projects considered under “extraordinary circumstances” to no more than 10% of all Final CESIR projects and commit to review the process and related exemptions/exceptions in 6 months to ensure the performance objective is not leading to circumstances which might jeopardize safety or system reliability. The status will be continually monitored and reported to the applicant and Department of Public Service Staff (“DPS Staff”), along with the status of all DG interconnection projects.

For Active Projects That Are between the Above Study Phases 2 and 3a/3b:

National Grid will break out and track the data into two discrete categories:

1. Projects Awaiting Applicant Decision
2. Projects Awaiting Applicant/Utility Resolution
3. Projects on hold due to utility system investment/construction required, or utility obligation to serve others for storm restoration or force majeure

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An example of Category 2 is when the Preliminary Study is complete but the applicant is questioning the outcome/next steps. In that case, upon notification that there is a dispute, National Grid will escalate the issue to its Ombudsman for the purpose of engaging the applicant to reach an expeditious resolution. National Grid will diligently track all completion dates, dispute descriptions, and dispute outcomes. National Grid will share the data with the Developers and the DPS at a mutually agreed to pace. After six months of such data collection, National Grid will review the process with DPS Staff as to the success in achieving expeditious dispute resolutions and for the purpose of determining if the practice has merit for all utilities and should be captured in the next revision to the New York State Standardized Interconnection Requirements (“SIR”).

We have additionally attached the testimony of John Gavin, Vice President of Electric Systems Engineering for National Grid, as presented to the New York State Assembly Committee on Energy and Committee on Economic Development, Job Creation, Commerce & Industry on May 6, 2016 in New York City to illustrate efforts made by National Grid up to that date to advance DG interconnections.

Sincerely,

Chris Kelly

SVP of Electric Process and Engineering (Acting)

Enc.

cc: Kenneth Daly, w/enclosure (via electronic mail)  
Terence Sobolewski, w/enclosure (via electronic mail))  
Allen Chieco, w/enclosure (via electronic mail)  
Cathy Hughto-Delzer, w/enclosure (via electronic mail)  
Tammy Mitchell, DPS Staff, w/enclosure (via electronic mail)

## On Behalf of National Grid

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### Testimony of John Gavin, Vice President - Electric Systems Engineering

May 6, 2016

#### **Testimony before the New York State Assembly Committee on Energy and Committee on Economic Development, Job Creation, Commerce & Industry**

Good morning, Chair Paulin, Chair Schimminger, and distinguished members of the Assembly. I am John Gavin, Vice President of Electric Systems Engineering, and am here representing National Grid. With \$1 billion in annual capital spending in New York, and on track to invest close to \$3 billion in our electricity network over the next five years, National Grid, as you know, is a retail natural gas service provider in New York City, Long Island, and upstate New York; a retail electricity service provider in upstate New York; and owner and operator of electricity generation on Long Island. I appreciate the opportunity to update the Assembly on our initiatives supporting Distributed Generation and our role in helping to achieve a decarbonized energy network.

National Grid's 8,000 New-York based employees live, work and raise our families alongside the 4 million customers we serve. That shared sense of community has taught us that our customers are savvy, forward-thinking, and deeply mindful of the environment. That makes our role as a major energy provider straightforward: We need to ensure that our energy becomes cleaner, more efficient, resilient and reliable – all while offering customers more choices and more control. Our goals align nicely with the REV process and with the leadership role New York is playing in the energy industry's transformation.

On Earth Day 2016, National Grid was honored to be a guest at the United Nations as world leaders from 175 countries signed the Paris Climate Accord. Like the signatories, we are committed to the shared goal of reducing carbon emissions. We fully support New York's target of 50 percent renewables by 2030 and the U.S. goal of 80 percent renewables by 2050.

We also fully support customer-owned renewable generation. It's good for our environment, it's good for our communities and, importantly, solar and other distributed energy resources are essential to achieving these very aggressive and important clean energy goals.

Recognizing the critical role solar will continue to play in New York, National Grid, along with other state utilities and three of the nation's leading solar developers, formed the innovative Solar Progress Partnership. The partnership is designed to encourage more renewable energy across the state while ensuring a reasonable cost for customers, and the safety and reliability of the electricity grid.

National Grid also is working in collaboration with the Buffalo Niagara Medical Campus and community leaders on a REV demonstration project that will help determine the best ways to increase solar penetration and energy efficiency adoption in communities that could potentially be underserved by third-party market participants.

Another demonstration project – with Clarkson University, SUNY Potsdam and others – is studying the feasibility of building an underground microgrid that would enable renewable energy to add resiliency and efficiency to the North Country electricity grid.

Initiatives like these are helping us modernize the grid and integrate renewable energy into our system. They also highlight the innovation, efficiency and strategic partnerships that it will take to meet customer needs and do our part in achieving a decarbonized energy network. What we are hearing, and learning, through these projects – from our customers, regulators, policymakers, market participants and communities – will inform the way ahead across our service territory.

National Grid's US business is among the top 10 utilities in the country when it comes to installing solar. In upstate New York we have distributed generation projects – both installed and proposed – that include solar, wind, CHP (combined heat and power), hydro and biomass.

It's clear that solar energy is growing rapidly across upstate New York, thanks in large part to federal and state incentives and utility support. Solar facilities represent 88 percent of all interconnected systems and about 93 percent of all proposed systems.

That's great news. It also presents a challenge: National Grid has received more than 10,000 solar applications over the last two years. That's a 500 percent increase from 2013. We know that we are not alone and that New York's other utilities also are experiencing significant increases in interconnection requests. Yet, partly due to the vast size of National Grid's service territory, our volume is 2 to 50 times higher than our fellow utilities, currently representing nearly half of interconnection requests in our state.

Over the last five years, we connected more than 10,000 renewable projects totaling 200 megawatts in upstate. That's enough electricity to light 35,000 homes. In fact, we connected more renewable projects in 2015 than in the previous 12 years combined, and a full 100 percent more in 2015 than in 2014. Each application must be reviewed to ensure continued safety, reliability and power quality for all customers – both those interested in connecting solar, and the 1.6 million upstate residential and businesses customers who count on us for their daily energy needs.

There are two types of solar applications: simple and complex. Simple solar projects represent more than 92 percent of the applications we receive and are typically residential rooftop or ground solar panels. They average 6 kilowatts in size – enough electricity to meet the energy needs of a large residential home – and are reviewed and provided conditional approval within 10 days.

Our challenge lies with the larger, more complex solar applications that have been submitted in abnormally high volumes due to pending changes to net metering credit policies. Complex solar projects – typically hosted by schools, municipalities, hospitals, colleges – average 1,375 kilowatts.

While complex projects represent fewer than 8 percent of applications we received, they must undergo a more comprehensive engineering analysis than smaller projects. The detailed review is required to identify the nature and cost of any electricity system modifications needed to ensure the customer's proposed system can be connected to National Grid's infrastructure without impacting safety, reliability and power quality.

Since May 2015, National Grid experienced two surges of complex applications, totaling more than 1000 megawatts over 12 months. Those surges represented a more than 700 percent increase compared to the previous 12-month average. Again, that's great news; however the unanticipated volume outpaced our ability to complete engineering reviews within prescribed timeframes. We have a plan in place to tackle the backlog and move these projects forward. It includes:

- Increasing engineering support by nearly 300 percent.
- Streamlining processes without compromising safety and reliability.
- Developing a new online application portal to provide customers with greater visibility into their proposal's status.
- Ongoing meetings with developers, customers and other key stakeholders to improve education and transparency.
- Providing a single point of contact for large developers to better understand their priorities and help them manage their portfolios.
- Active participation in the Interconnection Technical Working Group, a team of utilities and distributed generation stakeholders who discuss and recommend further improvements to the regulated interconnection process.

- Anticipating and preparing for increased complex solar construction projects and associated net metering, the next steps after engineering reviews are completed and customers decide to move forward with their proposals.

Implementing these actions better positions us to process future complex applications within required timeframes. In the meantime, we continue to work closely with our customers and their developers to keep them informed of their project's progress.

### **Solar Progress Partnership**

Recently, National Grid, as a member of the Solar Progress Partnership, submitted a proposal to regulators that would enhance the state's current net metering policy for solar customers and encourage further development of clean energy projects. The proposal marks a significant step forward in promoting clean, renewable energy in New York.

If approved, the proposal would have community solar customers receive full retail net metering credits that would be partially paid by developers. It would allow net metering to continue for individual homes and businesses and have solar farms and other large installations pay a fee to the utility for electricity grid maintenance. The fee would help lessen cost-shifting to non-solar users. Over time, the fee would be based on a formula that includes the wholesale power rates, transmission costs, the relief it provides to the electricity grid, and the environmental or societal benefit it provides.

In addition to National Grid, members of the Solar Progress Partnership include SolarCity, SunEdison, and SunPower Corporation, as well as Consolidated Edison, Central Hudson Gas & Electric, New York State Electric & Gas Corporation, Rochester Gas and Electric, and Orange and Rockland Utilities.

### **Summary**

In 2015 alone, National Grid connected close to 5,000 customer-owned solar projects to our upstate electricity network. While that's more than any other utility in the state, we plan to do better. We'll continue to keep safety and reliability at the forefront as we refine our processes and work with regulators, customers and developers to advance this emerging industry.

As one of the largest utilities in New York and the country, National Grid is committed to taking a leadership position in the industry to ensure the success of distributed generation and customer-owned solar. National Grid welcomes the opportunity to work with the Assembly, our regulators, utilities and other stakeholders to continue to develop strategies that enable New York to achieve its goals for renewable energy.

Thank you for this opportunity to address the committees. I would be happy to answer any questions you may have.