Smart City
REV Demonstration Project
City of Schenectady, New York
Case 14-M-0101

Quarterly Report – Q3 2020

October 30, 2020

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1.0 Executive Summary

Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid" or the "Company") has partnered with the City of Schenectady ("Schenectady" or the "City") to demonstrate a smart city solution. Using the Company's outdoor lighting infrastructure as a platform for advanced outdoor lighting services, the Company and the City are deploying smart city technologies and testing the business models that will animate the advanced outdoor lighting and the smart city markets (the "Project").

The Project is intended to identify innovative smart city solutions that will help the City expand the breadth and efficiency of the services it provides to its residents. This approach aligns with the Company's efforts to test, scale, and deploy clean energy solutions in line with the Reforming the Energy Vision ("REV") objectives, the State's clean energy agenda, including the Climate Leadership and Community Protection Act ("CLCPA"), and National Grid's own clean energy ambitions. Specifically, the partnership between the Company and the City will test whether the Company's outdoor lighting infrastructure can facilitate the adoption of smart city technologies by deploying approximately 4,275 efficient light-emitting diodes ("LED") outdoor lighting fixtures, network lighting control ("NLC") nodes, and smart city technologies. The upgrades will effectively turn Schenectady into a smart city, capable of saving energy, more efficiently providing municipal services, and opening the door to further innovation.

During the third quarter of 2020, the Company advanced several aspects of the Project, including:

- Installed six additional smart city sensors through the make-ready process and replaced eight smart city sensors in Zone B.
- Conducted streetlight output measurements in Zone A.
- Performed troubleshooting at 75 locations for NLC, streetlight, and smart city technology issues.
- Continued to work with vendor partners to troubleshoot NLC and smart city technology issues in Zone A.
- Progressed Rensselaer Polytechnic Institute ("RPI") lighting research towards data collection.
- Initiated contract negotiations with the presumptive phase 2 vendor.
- Resumed lab testing of NLCs and participated in ANSI C136.50 standards drafting.

Finally, the Company delivered the Phase 2 LED conversion letter to the City.

2.0 Highlights Since Implementation Plan Filing

The tables in Sections 2.1 and 2.2 below provide detailed descriptions of the major activities completed in the last quarter, as well as the challenges, lessons learned, and risk mitigation strategies from this work.

2.1 Major Task Activities

The Company worked on eight significant tasks during the third quarter of 2020. First, the Company installed six additional smart city technologies through the make-ready process, bringing the total number of installations to 245 of the 250 planned in Zone B. Make-ready locations were chosen together with the City based on their locational value while avoiding congested poles. The majority of make-ready work entailed adjusting the streetlight arm or the first telecom attachment to meet the National Electrical Safety Code ("NESC") H238B-2 clearance requirements. In addition, the Company replaced eight smart city technologies in Zone B due to device failures and returned them to the manufacturer for refurbishment. Due to material shortages and delays with the manufacturer related to COVID-19, the remaining five make-ready locations will be scheduled to be addressed in the next quarter.

Second, the Company conducted streetlight output measurements in Zone A with City staff on July 28th at Lower Union Street (please see the data collected in Appendix C). The data collected will be used to determine the optimal streetlight luminaire for phase 2, in consideration of other contributing factors such as wattage usage under dimming setpoints, installers feedback, and the preference of the City. The luminaire selection will be made prior to the fourth quarter of 2020 and before commencing LED conversion engineering design.

Third, the Company was able to take advantage of the GE® LightGrid lighting platform deployed in Zone B to identify and remediate streetlighting outages. Being able to identify streetlight outages proactively enhances the Company's ability to address the outages. In contrast, ongoing connectivity and NLC issues in Zone A prevented the Cimcon® LightingGale lighting platform from being used for streetlight outage management. Even though NLC related problems are primarily in Zone A, the Company also had to replace several NLCs in Zone B. During the quarter, the Company performed troubleshooting at 75 streetlight locations (3 percent of total in Zones A and B) for NLC and lighting issues.

Fourth, the Company continued to work with Zone A vendor partners to resolve NLC connectivity and hardware issues. The intermittent NLC connectivity issue was resolved by replacing failed NLCs in the field with new NLCs on the latest firmware and a change to the Dynamic Host Configuration Protocol ("DHCP"). However, the introduction of new NLCs to the mesh network and the DHCP change presented a new issue with approximately 120 NLCs remaining offline. In addition, Zone A vendor Cimcon® communicated the need to change out thirty smart city technologies due to defects with the sensor manufacturer. The vendor group identified the next steps in connectivity troubleshooting to include antenna swap outs, NLC replacements, and testing and deployment of thirty replacement smart city technologies in the next quarter.

Fifth, the Company progressed the lighting research in partnership with RPI towards planning and design. With the help of the City, the Project team identified a residential and a commercial location suitable for the study (Figure 1). These locations were also chosen because nearby smart city technologies can provide pedestrian and vehicle traffic analytics. In addition, field lighting output measurements were also performed for sections of these neighborhoods. During the quarter, RPI also developed a preliminary draft of the resident survey. The Project team expects the study to be concluded in Q1 2021 and to be able to gather insights on optimizing streetlight dimming while maintaining safety and security.

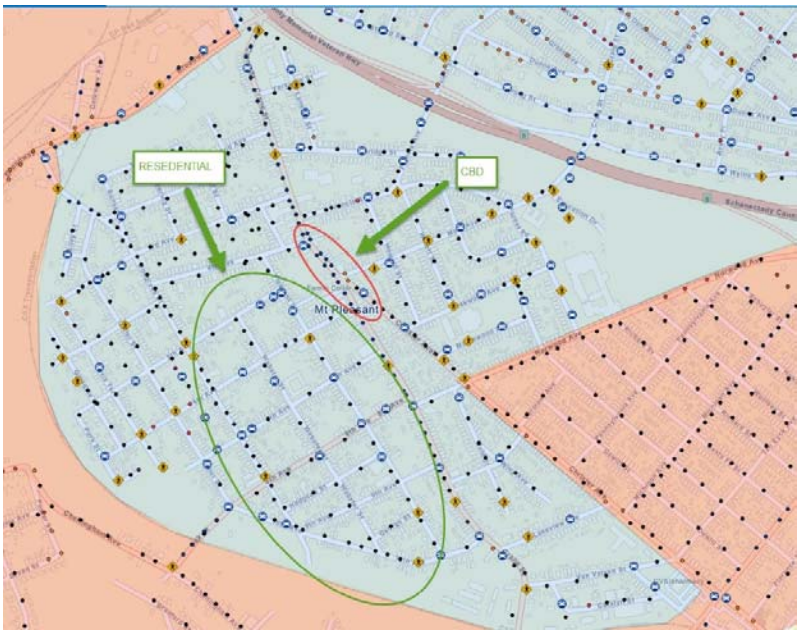


Figure 1. A map of Zone B identifying the residential and central business district. The physical study area may be refined to smaller areas in the Mont Pleasant neighborhood.

Sixth, the Company and the Phase 2 bid awardee (to be announced in Q4 2020 after contracting) progressed contract development and entered negotiations. Weekly meetings were held to develop contract artifacts and negotiated terms and conditions that are specific to the project. In addition, City staff members supported the statement of work review to ensure all components of the statement of work are consistent with the needs of the City and the project scope. The Company anticipates contract signing early next quarter and will begin the development of a smart city technology deployment plan.

Seventh, the Company continued to participate in the American National Standard Institute ("ANSI") C136.50 Subcommittee efforts to develop a nationally accepted revenue metering standard for NLCs. Because of COVID-19 restrictions, the approval process of the proposed ANSI C136.50 standard was delayed. With most requirements solidified, to advance lab testing of the two deployed NLCs and the Phase 2 NLC technology, the Company began testing the proposed standard requirements to these NLCs. Completion of preliminary tests will validate the ANSI 136.50 standard and identify the number of requirements met by each NLC, along with deficiencies of each NLC technology. Once ANSI C136.50 is adopted, the standard and NLCs will require approval by the New York State Public Service Commission before implementation can proceed.

Finally, the Company presented the Phase 2 LED conversion letter for remaining zones C, D, and E to

the City. Upon agreement and commitment of payment to National Grid for the net book value of existing luminaires, LED conversion engineering design will begin. Once engineering design is completed, the Company will procure LED fixtures, commence installation contractor coordination, and, most importantly, align construction activities with the Project to facilitate single truck-rolls for both LED conversion and smart city technology installations.

Given the challenges and delays experienced in Q3 2020, the Company aims to complete all remaining Phase 1 activities to install five smart city technologies in Zone B, as well as address both NLC and smart city technology issues in Zone A. The Company will target contract execution in the next quarter with the Phase 2 awardee and begin engineering design work for LED streetlight conversion with smart lighting and smart city technology. The updates are included as part of the revised work plan included in Appendix A. Also, the Company provides a further description of general Project milestones below:

Anticipated Start /End Date	**Adjusted Start/End Date**	**Checkpoint/ Milestone**	**Status**	
October 2018 to December 2018		Install LED (Proof-of-Concept Stage; Max. 20 Fixtures)	Completed	
October 2018 to June 2019	October 2018 to June 2020	Install LED & NLC Nodes (Zone A & B; Approx. 2,250 Fixtures) Compare vendor solutions	Completed	
October 2019 to June 2020	October 2019 to October 2020	National Grid Install Smart City Sensor Nodes (Zones A & B)	Delayed Completion	
July 2019 to June 2021	January 2020 to December 2021	LED and NLC Node Steady State (Evaluate operational capabilities)	Delayed Completion	
July 2020 to October 2020	April 2021 to June 2021	Install LED and NLC Nodes (Zones C, D, & E; Approx. 2,000 fixtures)	On Track	
July 2020 to October 2020	April 2021 to May 2021	National Grid Install Smart City Sensor Nodes (Zones C, D, and E)	On Track	
January 2020 to July 2020	January 2020 to December 2021	City Install Smart City Device Attachments to Smart City Sensor Nodes (All Zones)	Delayed Completion	
October 2018 to March 2019	October 2018 to October 2019	National Grid Implement Multi-Purpose IoT Mesh Network	Completed	
September 2019 to October 2020		National Grid Install IoT Mesh Network Sensors and Meters (Gas ERTs; Temperature Sensors;	On Track	

Anticipated Start /End Date	Adjusted Start/End Date	Checkpoint/ Milestone	Status	
		Environmental Sensors; Etc.)		
January 2019 to June 2020	June 2021 to December 2021	Explore potential Third-Parties Sensors (Smart-Home Devices; Electric Vehicle ("EV") Chargers; Water Leak Sensors; Water Shutoff Valves; Water Meters; Vacant-Home Sensors; Parking Management Sensors; Etc.)	On Track	
November 2020 to June 2021	June 2021 to December 2021	Steady State Review and Evaluations	On Track	

2.2 Successes, Challenges, Changes, and Lessons Learned

Below is a high-level description of lessons learned which the Company is using to inform its ongoing work and future smart city deployments:

1. Because smart city technologies are non-traditional attachments to utility infrastructure, technology providers must provide product specification drawings and mounting methods for the Company to ensure code compliance before installation.
2. Once the utility provides installation guidelines, a field survey must be conducted on the proposed location to ensure existing conditions can safely accommodate the installation. The NESC H238B-2 requirement for the Current® by GE Digital Infrastructure node added complexity to the Project. However, this important lesson learned is a testament to the Company's strong culture of doing business through safety-by-design principles.
3. After starting to deploy street lights with NLC nodes, the Company and the City recognized the potential benefits offered through the technology. The lighting platform provides the City with greater control, convenience, and the potential to unlock additional energy savings through platform capabilities. The Company also recognized the value the technology can bring to enhance outdoor lighting services, deliver more carbon savings, and increase customer convenience.
4. Some smart city technologies are manufactured abroad, resulting in longer product lead times. This has created approximately three months of delays due to manufacturing and overseas transport. The Company used this lead time to conduct additional due diligence and prepare for the installation process.
5. Depending on the advanced network lighting solution, the installation needs to follow the optimal deployment scheme for the technology. Whether it is a point-to-many-points solution, cellular, or mesh technology, the deployment scheme should involve close communication and

guidance with the manufacturer. This allows the technology to function as desired from the start.

6. Currently, there is no approved national metering accuracy standard for NLC nodes. While ANSI standard C136.50 is being developed, the Company believes ANSI standard C12.20 is a reasonable proxy to test NLC nodes for the Project. Additional time will be needed for lab testing of NLC nodes to incorporate the components of both ANSI standards.
7. The initial observations of the Project have identified a variety of NLC technology benefits that provide opportunities to enhance outdoor lighting services and provide operating cost efficiencies.
8. Continued involvement in the ANSI C136.50 NLC industry committee will build on the Company's meter testing experience for preliminary tests. The knowledge gained will enable the Company to formulate business models for various technology applications to provide customers with alternate service options and rate structures.
9. NLC metering accuracy specifications and industry-accepted testing requirements are needed before NLC meter data can be used for billing purposes. In addition, the integration of NLC meter data into the Company's billing system may require system upgrades.
10. The multipurpose mesh technology installed in Zone A has experienced numerous endpoint connectivity issues since installation in Q4 2019. The vendor group has reached out to Cisco® for support and to conduct a root cause analysis.
11. The Project has seen several replacements of both NLCs and smart city technologies due to product defects or premature failures. Failed equipment are being returned to the vendors for further diagnosis and investigation. Furthermore, vendors should provide spares to reduce lead times required for field replacements. The Company is taking this learning into the Phase 2 deployment and will explore options to minimize return trip expenses.
12. During the September 30th storm that impacted the Schenectady County and the broader capital region, both smart city solutions deployed in Zone A and B required manual intervention to ensure functionality is restored after a power outage.
13. Technologies deployed in Zone B can also be used to enhance public safety. The data collected by the smart city technologies and accessed by City officials can help respond to dangerous incidents or circumstances and promote public safety. Toward realizing this benefit, the City will expand access to more staff members and provide additional internal training.
14. The cost of 4G LTE is decreasing, improving the cost-effectiveness of cellular networks for smart city technologies requiring high bandwidth for connectivity. Cat-M1 is an increasingly popular low cost, low power connectivity option for IoT devices. The project will deploy lighting controllers operating on a cellular provided Cat-M1 for connectivity.
15. LoRaWAN® is also becoming an increasingly popular low power IoT network connectivity option. The Project received a LoRaWAN® gateway from Phase 1 vendor partner Presidio®. The Company and the City will explore demonstration opportunities during Phase 2.

The table below highlights the successes, challenges, and lessons learned in Q3 2020 and identifies the corresponding adjustment to the Phase 1 deployment and Phase 2 startup schedule:

Success, Issue, or Change	**Strategies to Resolve**	**Resulting Change to Project Scope/ Timeline**	**Lessons Learned**
Smart city technologies deployed in Zone B are delivering value to the City.	N/A	N/A	The City informed the Company in regular weekly meetings that Zone B technologies are delivering valuable information and insights to several city departments. For example, since deployment of the technologies that City has used the equipment to obtain information relating to violent crimes and public safety matters. The City is expanding access to additional staff members and providing additional internal training.
Endpoint connectivity challenges with the mesh network in Zone A.	The Company is meeting on a weekly basis with vendor partners to track progress. Vendor partners are meeting on a regular basis to resolve ongoing issues. Cisco® is supporting and will conduct a root cause analysis. The Company will also support field troubleshooting efforts.	Delays in delivering functional lighting platforms.	Once the root cause analysis is performed by Cisco, the Company will infer lessons learned from this challenge. The Zone B lighting network is also a low powered mesh network and has not encountered major issues.
Thirty Zone A smart city sensors require replacement due to manufacturer defects.	The Company will work with Cimcon® to test new sensors before replacing all thirty sensors currently deployed in the field.	Replacement of field sensors to produce accurate smart city data.	After smart city technologies are installed, the commissioning process will inform whether sensors are gathering accurate data. If the data is not accurate, the issue needs to be addressed either through software configurations or hardware adjustments.

Success, Issue, or Change	Strategies to Resolve	Resulting Change to Project Scope/ Timeline	Lessons Learned
Several smart city device defects and premature failures.	The Company will continue to work with vendor partners to remediate failed equipment. The vendors will diagnose and investigate for a root cause.	N/A	Product defects and premature failures should be anticipated, especially with advanced technology. However, failure rates need to be tracked to reduce ongoing maintenance expenses. Furthermore, vendors should provide spares for the Company to reduce lead times and the number of truck rolls for replacements. The Company will take this learning into Phase 2 to minimize maintenance expenses.
Manual intervention is needed after a critical outage, such as the power outage experienced during the September 30th storm.	The Company will review and address equipment outages with vendor partners. Should field repairs be required, the Company will perform field troubleshooting.	N/A	Similar to outage management after an outage event, the Company needs to ensure all technology functionality is restored after devices go through a power outage.
Phase 2 technologies will operate on carrier-maintained networks, specifically 4G LTE and Cat-M1.	N/A	Continue to explore 3rd party sensors on the multipurpose network deployed in Zone A and work with the City to explore LoRaWAN® as the new market multipurpose network.	4G LTE network connectivity provides better service for smart city technologies requiring high bandwidth. The cost of 4G LTE service is also decreasing. For smart city technologies requiring low bandwidth, Cat-M1 eliminates the need to maintain a private network and gateways. These network options were selected for Phase 2 based on several reasons including network cost and geographic distribution of streetlights in Zones C, D, and E. The Company will work with the City to explore opportunities with a new low-power multipurpose network protocol called LoRaWAN®.

2.3 Stakeholder Engagement and Knowledge Sharing

COVID-19 presents challenges to continue in-person stakeholder engagement. However, the Company and the City explored options such as press releases and virtual web-hosted meetings to engage with residents and stakeholders. The Company will continue to explore options with the City to determine the best media approach to engage with project stakeholders.

3.0 Next Quarter Forecast

The connectivity and hardware challenges in Zone A present additional fieldwork for the next quarter to resolve and to deliver functional solutions to the City. The Company will continue to monitor the COVID-19 situation and perform the remaining Phase 1 activities. In parallel, the Company will work closely with the Phase 2 awardee to finalize contract negotiations to commence Phase 2 activities.

In the fourth quarter of 2020, the Company expects to perform the following tasks:

- Deploy five remaining smart city technologies in Zones B through make-ready work;
- Troubleshoot connectivity and smart city device issues in Zone A;
- Upon lifting out-of-state travel advisory for Florida, the Company will complete cybersecurity penetration testing;
- Evaluate the deployed technologies in Phase 1;
- Execute a contract with the presumptive awardee for Phase 2;
- Begin Phase 2 engineering design work;
- Progress lighting research with RPI; and
- Continue lab testing of NLC nodes to also include NLC technology planned for Phase 2.

4.0 Work Plan and Budget Review

4.1 Updated Work Plan

The Company made updates to the work plan outlined in the Project Implementation Plan to reflect changes in the status and ongoing workstreams. Given the complexities encountered on the Project, the Company updated the work plan to capture the following components:

1. Extend remaining Phase 1 activities into December 2020;
2. Extend lab test NLC nodes into December 2020;
3. Continue to assist the City with City-owned attachments into December 2020; and
4. Begin exploring LoRaWAN® with the City into May 2021.

The updated work plan is included in Appendix A.

4.2 Current Budget

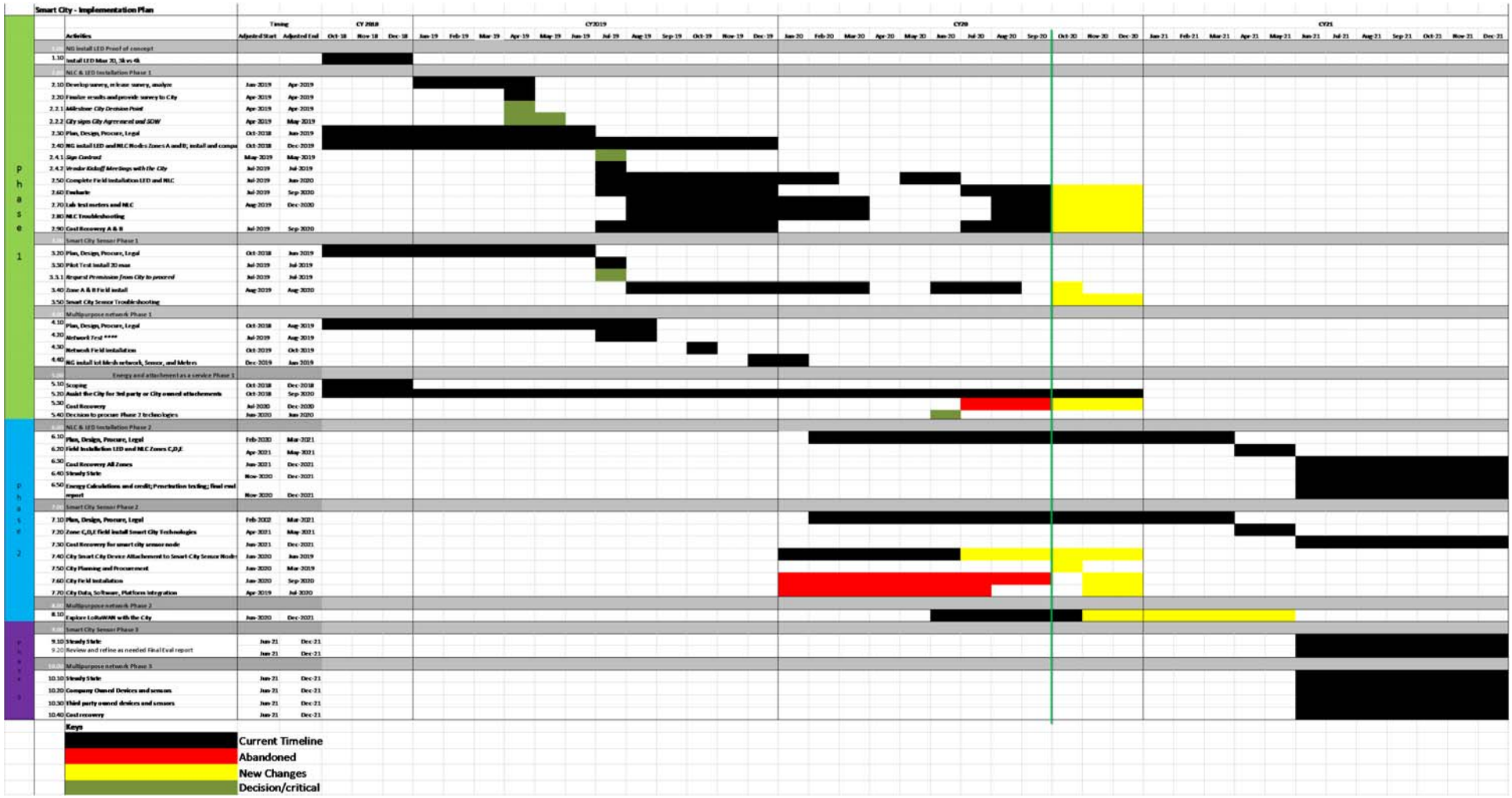
Project Task	Quarter Actual Spend	Project Total Spend to Date	Project Budget	Remaining Balance
CapEx				
Smart Lighting	$44,291	$453,230	$2,170,000	$1,716,770
Network	$15,601	$250,781	$390,000	$139,219
Smart Sensor	$73,068	$1,781,472	$3,100,000	$1,318,528
Project Support		$158,997	$100,000	-$58,997
Lighting System Evaluations		$9,463	$150,000	$140,537
Smart City Data Analytics	$11,250	$11,250	$100,000	$88,750
Data Platform		$239,088	$250,000	$10,912
Network Management		$153,406	$250,000	$96,594
Capital Overhead	$4,116	$669,138	$0	-$669,138
OpEx				
Smart Lighting		$0	$180,000	$180,000
Network		$0	$715,000	$715,000
Smart Sensor		$0	$180,000	$180,000
Total	**$148,325.13**	**$3,726,825**	**$7,585,000**	**$3,858,175**

5.0 Quarterly Report Template

Quarterly Report Template	
Milestones:	
Project Milestones Accomplished:	No major milestones were attained during Q3 2020.
Next Quarter Project Milestones:	1. Complete the remaining five make-ready to complete smart city technology deployment for Phase 1. 2. Resolve Zone A challenges to complete remaining Phase 1 activities. 3. Perform Phase 1 solution evaluations 4. Assist the City with City-owned smart city attachments

Quarterly Report Template	
	5. Execute a contract with Phase 2 vendor
Tasks/Timeline:	
Completed Project Tasks Since Last Quarterly Report:	1. Installed six make-ready in Zone B totaling 245 of 250 planned installs 2. Measured streetlight output in Zone A 3. Troubleshoot 75 streetlights for NLC and streetlight issues 4. Worked with Zone A vendor groups to resolve endpoint connectivity issues 5. Progressed lighting study with RPI towards planning and design 6. Progressed contract development and negotiation for Phase 2 7. Continued involvement in ANSI C136.50 and lab testing of NLCs 8. Delivered Phase 2 LED conversion letter to the City 9. Continue to support City-owned smart city attachment to streetlights
Changes or Impacts to Schedule Since Last Quarterly Report:	1. Extend remaining Phase 1 activity into December 2020; 2. Extend lab test NLC nodes into December 2020; 3. Continue to assist the City with City-owned attachments into December 2020; and 4. Begin exploring LoRaWAN® with the City into May 2021.
Lessons Learned:	Please refer to section 2.2 Challenges, Changes, and Lessons Learned above.
Work Stream Coordination:	Coordination occurring among the Company's electric business unit, gas business unit, procurement, communications, marketing, customer organization, energy efficiency, grid & network communications, Metering and billing, grid modernization, AMI, and IT group for engineering design, review, and deployment.
Risks:	
Identified Risks:	Zone A endpoint communication challenges and smart city device issues.
Risk Mitigation Plan:	Continue to work with Zone A vendors to resolve connectivity issues and Cisco® for a root cause analysis. Test and replace thirty smart city sensors in Zone A.
Finance:	
Total Spend to Date:	$3,726,825
Target Budget Spend:	$4,236,117
Actual Incremental Spend:	$0
Variance:	$509,292
In-Kind and Grant Support (Specifically for REV Demo):	Estimated $150,000 from Phase 1 vendors.
Additional Notes:	

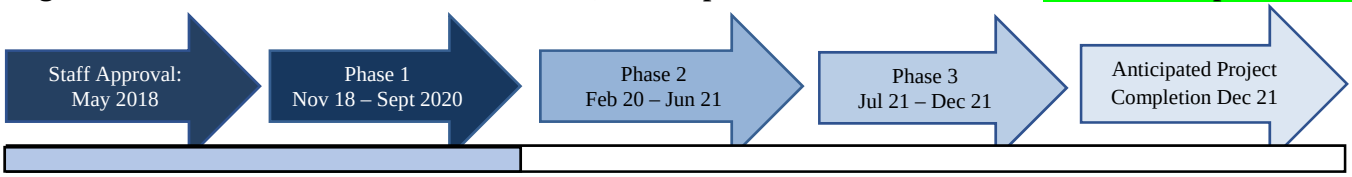
Appendix A – Updated Work Plan



Appendix B – Summary One Pager

nationalgrid **Smart City Schenectady REV Demo** **Q3 2020** **Overall Status (Active)**

Project Start Date: 05/24/2018 **Project End Date:** 12/30/2021
Budget: $7,585,000 **Current Quarter Spend:** $148,325 **Cumulative Spend**: $3,726,825



Project Summary: The Project is designed to test whether the Company's outdoor lighting infrastructure can serve as a platform for advanced services through the deployment of a multipurpose IoT network to enable smart-city technologies, and to develop viable business models to animate the advanced outdoor lighting and smart city markets.

Cumulative Lessons Learned		
The Customer	**Market Partners**	**Utility Operations**
• Cities want more than smart lighting alone. The City of Schenectady intends to improve public services, increase public safety, and find ways to save money in the process. • The City and the Company understand the need to continue to engage with stakeholders as the Project progress. • Conversion to smart LED street lights with NLC nodes provides greater control, convenience, and opportunity for additional GHG savings that help meet clean energy and CLCPA goals. • Protecting citizen privacy and practicing cybersecurity are core towards a successful smart city deployment.	• The definition of Smart City is different for each city. Technology solutions must be customized to meet the needs of the city. • Standardization and market advancements would improve network interoperability between smart-city devices. • New and disruptive smart-city technologies are emerging on the market. The Project can benefit from new market entrants offering additional choices and new products. • The cost of smart lighting and IoT connectivity is decreasing.	• Building a smart city entails a complex deployment of diverse smart technologies. Utility involvement consolidates smart cities into a packaged solution, manage complex deployments, and provide long-term service. • Installation costs are high. However, deployment cost reductions can be achieved by combining smart city installation with LED upgrades. • Adequate time is needed to fully ensure the solution meets standard code compliance, data security, and data privacy requirements. Initial field surveys are also required to ensure code compliance. • NLC nodes offer a range of customer benefits and provide opportunities to enhance outdoor lighting services.

Application of lessons learned: Company is taking the learning gathered to inform its ongoing work and applying smart city attachment experience for other municipal applications.

Issues Identified: Zone A endpoint communication challenges and smart city sensor issues.

Solutions Identified: Continue to work with Zone A vendors to resolve connectivity issues and Cisco® for a root cause analysis. The Project team will test and replace thirty smart city sensors in Zone A.

Recent Milestones/Targets Met: No milestones were attained during the quarter.

Upcoming Milestones/Targets: Pursue make-ready services for the remaining five smart city sensor deployments in Zone B. Field cybersecurity testing of Phase 1 devices. Resolve Zone A network and device issues. Evaluate the deployed technologies for Phase 1. Execute a contract with the Phase 2 vendor. Complete lab testing of NLC nodes and report findings.

Appendix C – Lighting Output Measurement on Lower Union Street

DRIVER PERCENTAGE	LOCATION	POLE 11	MIDPOINT	POLE 12	MIDPOINT	POLE 13	MIDPOINT	POLE 14	MIDPOINT	POLE 15	MIDPOINT	POLE 16	MID POINT	POLE 17	MIDPONT	POLE 18	MIDPOINT	POLE 19
100	NORTH SIDE	1.00	0.04	0.30	0.11	0.13	0.06	0.17	0.04	0.31	0.12	0.36	0.18	0.30	0.10	0.23	0.25	0.85
100	CENTER ROADWAY	4.24	0.33	6.20	0.53	1.17	0.11	4.53	1.66	5.40	0.55	4.96	0.40	4.34	1.13	5.16	0.72	4.68
100	SOUTHSIDE	1.71	0.39	0.71	0.21	0.28	0.46	0.35	0.03	0.29	0.10	0.16	0.15	0.32	0.67	0.22	0.12	0.32
DRIVER PERCENTAGE	LOCATION	POLE 11	MIDPOINT	POLE 12	MIDPOINT	POLE 13	MIDPOINT	POLE 14	MIDPOINT									
50	NORTH SIDE	0.78	0.03	0.24	0.16	0.26	0.16	0.29	0.08									
50	CENTER ROADWAY	2.30	0.28	4.25	0.76	3.34	0.24	3.22	0.12									
50	SOUTHSIDE	0.81	0.03	0.13	0.10	0.33	0.03	0.16	0.04									
DRIVER PERCENTAGE	LOCATION	POLE 11	MIDPOINT	POLE 12	MIDPOINT	POLE 13	MIDPOINT	POLE 14	MIDPOINT									
25	NORTH SIDE	0.35	0.03	0.15	0.07	0.20	0.10	0.05	0.11									
25	CENTER ROADWAY	1.20	0.14	2.35	0.30	1.83	0.24	1.60	0.67									
25	SOUTHSIDE	0.53	0.08	0.08	0.02	0.15	0.18	0.08	0.04									
DRIVER PERCENTAGE	LOCATION	POLE 11	MIDPOINT	POLE 12	MIDPOINT	POLE 13	MIDPOINT	POLE 14	MIDPOINT									
15	NORTH SIDE	0.20	0.05	0.10	0.05	0.12	0.06	0.03	0.05									
15	CENTER ROADWAY	0.68	0.10	1.51	0.31	1.24	0.18	1.19	0.48									
15	SOUTHSIDE	0.25	0.02	0.06	0.01	0.10	0.02	0.07	0.02