Landis+Gyr

Carmen D. Diaz
Acting Secretary
New Jersey Board of Public Utilities
44 S. Clinton Avenue
Trenton, NJ 08625

March 29, 2023

Docket no. QO22110710

RE: Request for Comments issued March 1, 2023

Dear Acting Secretary Diaz,

Thank you for the opportunity to company on the development of a Light Emitting Diode ("LED") Streetlight Program. We at Landis+Gyr are excited that the BPU is pursuing LED streetlights and believe the conversion can greatly benefit New Jersey communities.

Landis+Gyr is the leading global provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios of products and services to address complex industry challenges, the company delivers comprehensive solutions for the foundation of a smarter grid, including smart metering, distribution network sensing and automation tools, load management, analytics, and electric vehicle charging. Landis+Gyr operates in more than 30 countries across five continents. With sales of approximately USD $1.7 billion, the company pursues the sole mission of helping the world manage energy better.

One of the primary benefits of this project is the energy savings that will be passed on from PSE&G to their customers. LED lights are considerably more energy efficient – up to 60% savings – than the existing High Pressure Sodium streetlights that are now in use and reduce energy consumption leading to lower energy bills and emissions. The inclusion of smart controllers in conjunction with the LED conversion will even provide additional savings in top of those by just switching to LED lights. By taking advantage of a new energy efficiency technology, PSE&G will support the 2019 Energy Master Plan Strategy 3: Maximizing Energy Efficiency and Conservation, and Reducing Peak Demand.

Environmental benefits are also realized through this project, as PSE&G estimates that converting to LED street lighting is expected to avoid 2,300 tons of CO2E emissions annually. These savings are critical to pursuing New Jersey's goal to reduce greenhouse gas emissions by 80% from their 2006 levels by 2050. The streetlight solution will also reduce light pollution and minimize wildlife disruption, as contemplated by the five principles of Dark Sky initiatives[1]. Many cities across the country are embracing these principles to ensure that public lighting is managed responsible.

Aside from the economic and environmental benefits, installing smart controllers as part of the LED streetlight conversion would enable communities to take advantage of new, valuable services and capabilities and will provide PSE&G the ability to accurately account true real lighting's energy consumption. PSE&G has deployed Landis+Gyr's Gridstream AMI communications as part of its smart

[1] https://www.darksky.org/our-work/lighting/lighting-principles/

meters initiative, and our smart streetlight controllers can be linked with that network and PSE&G's AMI's Head-End System. This will allow communities to monitor their electricity consumption, voltage and current. Towns and cities will be able to dim and turn on and off streetlights easily. Automated monitoring detects luminaire faults and malfunctions, regardless of luminaire type, minimizing potential risk to public safety. The Landis+Gyr Streetlight controllers could also be upgraded with a software package to provide a variety of Smart City capabilities, including traffic sensing and speed monitoring, air quality and particular matter data collection and noise monitoring.

- Speed Monitoring/ Traffic sensing - Enhanced Street safety by providing traffic data to optimize lighting schedules and improve traffic planning.
- Air Quality Monitoring - Ozone (O3), Nitrogen Dioxide and Sulphur Dioxide detection, to help monitor green gas emissions, making cities more liveable places. When correlating with Traffic sensing, cities can understand how much is coming from vehicles vs industry.
- Particulate Matter – To identify emissions from burning fossil fuels, and evaluate presence of dust, pollen, and smoke from fires.
- Noise Monitoring – Noise profiling helps in identifying excessive-noise problem areas to develop strategies of mitigation.

Switching to LED lights can provide notable benefits to New Jersey residents, businesses, and local governments. The integration of smart street controllers into this solution enables New Jersey communities to expand their capabilities and enhance the quality of life for their residents, all while achieving energy savings and air pollution reductions. We encourage the BPU to recognize these important economic and societal merits in the review of PSE&G's innovative application.

Thank you again for the opportunity to comment.

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