



November 1, 2013

SENT VIA FIRST CLASS MAIL AND ELECTRONIC MAIL

Luly E. Massaro
Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, Rhode Island 02888

Re: Docket #4442

Dear Ms. Massaro:

Please find attached comments filed by the VEIC/Optimal Energy Consultant Team on behalf of our client, the Rhode Island Energy Efficiency and Resources Management Council. An original plus 10 copies will be sent to you via first class mail. Additionally, an electronic copy will be provided to the Service List.

Sincerely,

Scudder Parker
Vermont Energy Investment Corp.

To: Rhode Island Public Utilities Commission
From: Energy Efficiency & Resources Management (EERMC) Consultant Team (Scudder Parker, Mike Guerard, Gabe Arnold)
CC: EERMC;
Date: 11/1/2013
Re: Comments on National Grid's Planned LED Street Lighting Tariff

The following comments were developed and presented to support the RI Public Utilities Commission's (RIPUC) deliberations on Docket 4442 on behalf of the RI Energy Efficiency and Resources Management Council (EERMC) by its VEIC/Optimal Energy Consultant Team (Consultant Team), and in particular its lighting expert, Gabe Arnold, P.E. This memo provides a brief status update and basic overview of the key issues regarding National Grid's planned tariff offering for LED street lights. The EERMC has directed the Consultant Team to provide any additional information, as needed and requested by the RIPUC.

More efficient street lighting using LED technology and street lighting controls represents a large new source of energy and cost savings for Rhode Island municipalities and a large source of new savings for National Grid's energy efficiency programs. National Grid currently owns approximately 123,000 street lights in Rhode Island whose costs are paid for primarily by municipalities through the current applicable National Grid rate. These street lights can represent a significant percentage of a municipality's electricity use. If all of these street lights were converted to new LED technology, the savings based on preliminary estimates indicate approximately 49,200 MWh could be saved annually, excluding the savings from controls. With controls added, savings could increase by 20%. The development of new rate tariffs for LED street lighting and controls are a critical step to enable municipalities in Rhode Island to move forward with this energy and cost saving opportunity.

In response to the Municipal Street Light Investment Act (House Bill No. 5935 Sub A; R.I. Gen. Laws 39-29-1), National Grid filed a new rate tariff to comply with the legislation. The new Rate allows municipal customers to purchase their street lights from National Grid. The municipalities may then install LED technology and controls to reduce their street lighting costs through reduced energy use and lower maintenance. Municipalities will continue to pay National Grid for the energy used by the street lights, but will take over responsibility for maintaining the street lights.

It is a part of the EERMC's mission is to secure the economic and environmental benefits of energy efficiency for Rhode Island and its people. This tariff and the street lighting energy

efficiency opportunity presented by it is an important issue for the Council and consistent with its mission. We believe Rhode Island municipalities should have the opportunity to pursue energy efficiency in the street lighting that they pay for, and receive the economic and environmental benefit of doing so. National Grid's street lighting service and associated filed tariff should:

- Offer a fair and reasonable process for municipalities to pursue improved street lighting energy efficiency, including the use of LED street lighting and controls.
- Provide municipalities the true economic and environmental benefit of more energy efficient street lighting and controls.

Our assessment of the filed tariff is that it only partially meets these criteria. Specifically:

- The process appears unduly burdensome. The resulting complexity and financial risks could effectively inhibit adoption of the tariff, thus preventing any electric energy savings and the associated environmental benefits.
- Even if these perceived barriers to adoption could be mitigated, the tariff does not provide adequate flexibility in the proposed operating schedules to allow municipalities to maximize the economic benefits from some types of advanced lighting controls. It is our professional judgment that street lighting control technologies are sufficiently advanced to provide energy savings beyond the levels accommodated in the filed tariff, and that these technologies would be desirable to municipalities if they could realize the economic and environmental benefits they make possible.