



Narragansett Electric Co. Guidelines for Customer-Owned Street Lighting Installation and Maintenance

The general safety and welfare of the public and all workers are of paramount concern to Narragansett Electric Co., d/b/a National Grid (hereinafter “Company”). These concerns are particularly salient as street lights are installed within the designated electric space on a distribution pole and/or provided service from underground electric distribution enclosures. To perform work on street lights, workers must often be within established electrical clearances above the communication space and in close proximity to electric distribution lines with voltages as high as 34.5KV. Therefore, the Company requires that anyone working above the communication space on Company poles or within electric distribution enclosures are electrically qualified as defined by OSHA 1910.269 (hereinafter “Qualified Electrical Worker”). Customer personnel or Qualified Electrical Workers are never allowed to enter a Company manhole, handhole, or other enclosed electrical equipment for any reason without the Company’s safety supervision personnel being present on site.

Maintenance of Overhead Customer-Owned Street and Area Lighting Equipment

Once the street lighting purchase process and the transfer of ownership of the unmetered street lights or the attachment of customer-owned unmetered street and area lighting as available under the S-05 tariff (new requests) is complete, the customer is responsible for maintaining all customer-owned street and area lighting equipment, including but not limited to: luminaires, standards, foundations, conduits and conductors. The Company will allow the customer to perform all maintenance activities on customer-owned equipment provided they are in compliance with the following provisions:

- The customer shall ensure that only Qualified Electrical Workers perform work on the street lighting system. This assurance will be provided to the Company through the execution of the Company’s Acknowledgment for the Use of Qualified Electrical Workers document (hereinafter “Acknowledgment”) by an appropriately authorized municipal or governmental official. This Acknowledgment is currently located in the Agreement for Customer-Owned Street and Area Lighting Attachments as Appendix Form G.
- If the customer’s workers do not meet the qualifications stated above, or the Company is not in receipt of a valid Acknowledgment, the customer shall request that the Company make all connections and/or disconnections of the customer’s street lighting system to the Company’s secondary distribution conductors to facilitate certain maintenance or equipment replacement in a de-energized condition. If this occurs, the Company will assess the appropriate service charges per the Company’s Terms and Conditions for Distribution Service.¹

Maintenance of Underground Customer-Owned Street and Area Lighting Equipment

Customer personnel or Qualified Electrical Workers are never allowed to enter a Company manhole, handhole, or other enclosed electrical equipment for any reason without the Company’s safety supervision personnel being present on site.

¹ R.I.P.U.C. No. 2130.



Narragansett Electric Co. Guidelines for Customer-Owned Street Lighting Installation and Maintenance

However:

- At the sole discretion of the Company, the customer's Qualified Electrical Workers may be allowed supervised access to perform maintenance or equipment replacement functions of customer- owned equipment within enclosed Company facilities.
- When supervised access is denied, the Company shall schedule and perform the required customer work and be reimbursed for all time and expenses, including materials, in accordance with the Company's Attachment Agreement.

The Company will allow the customer to perform all routine maintenance activities on customer-owned underground fed equipment provided compliance with the following provisions:

- The customer shall ensure that only Qualified Electrical Workers work on its street and area lighting system by having an appropriately authorized municipal or governmental official execute the Acknowledgment.
- The Company will permit a customer's Qualified Electrical Worker to install the fused disconnect device through the access point at the pole base of the first street light from the source while the street and area lights are energized.
- As mentioned previously, if the customer's workers do not meet the qualifications stated above, or the Company is not in receipt of a valid Acknowledgment, the customer must request that the Company make all connections and/or disconnections of the customer's street lighting system to the Company's secondary distribution conductors to facilitate certain maintenance or equipment replacement in a de-energized condition. If this occurs, the Company will assess the appropriate service charges per the Company's Terms and Conditions for Distribution Service as referenced in the Company's Attachment Agreement.

Electric System Separation

Per the Company's Attachment Agreement, the customer is responsible for creating a physical electrical separation between the Company's secondary conductors and the customer-owned street and area light conductors. This separation is accomplished by installing a fused disconnect device (e.g., an in-line fuse holder capable of utilizing a midget cartridge style fuse on every street and area light supply located as near as possible to the connection to the Company-owned secondary conductors). The Company will permit the customer to install the disconnect devices on existing street light locations in an energized condition using Qualified Electrical Workers, which will include the disconnecting of the existing energized supply conductor source to the street light luminaire. This should not require a visit from the Company to de-energize or re-energize the street light source at the service connection.

- The fused disconnect device, in addition to providing electrical protection, shall serve as a disconnect point for the customer-owned street light. Once installed, the customer's Qualified Electrical Worker may disconnect or reconnect a customer-owned street light(s) using the fuse device to perform maintenance or other equipment

Narragansett Electric Co. Guidelines for Customer-Owned Street Lighting Installation and Maintenance

replacement. The disconnect device must be installed prior to or during any major maintenance/equipment replacement of an existing light (luminaire replacement, arm/bracket replacement, etc.) or within a period not greater than 10 years following the purchase date, and must be installed at the time of any new customer-owned lighting attachment. Further, in the event a customer plans to purchase the Company's street lights and convert to LED or other light source, this fused disconnect device is required to be installed at the time of conversion.

- For underground customer circuit applications, the customer shall locate the disconnect device within an enclosure installed and owned by the customer and located in close proximity to the designated service connection location within the enclosed Company facility. However, optimum location for the disconnect device is within an enclosure installed and owned by the customer and located in close proximity to the designated service connection location within the enclosed company facility. However, at a minimum for existing street lighting installations only, the disconnect device can be located within the base of the first street light standard closest to the circuit's service connection.
- If it is found that the existing street light conductors or circuits are insufficient, the Company will allow the customer to install a #10 AWG wire of sufficient length, and will allow the customer to make the permanent connections to the Company's secondary using the appropriately sized connectors per the Company's Customer-Owned Municipal Lighting Standards.

New or Relocation Lighting Requests - Overhead

For new customer-owned street lighting attachments or the relocation of existing street lights sourced by overhead equipment, the customer must submit the appropriate Company forms provided in the Attachment Agreements prior to a required field survey by the Company personnel or agent. The field survey is performed to ensure all NESC clearances and loading conditions of the distribution structure or pole are acceptable. If existing clearances and load capacity are sufficient, the Company shall approve the customer's installation or relocation of street lighting equipment. If existing clearances and load capacity are not sufficient to accommodate the requested attachment, the make-ready terms and provisions of the Attachment Agreement will become applicable.

Once the appropriate conditions for installing or relocating the equipment are met, the customer shall:

1. Install the equipment per the Company's Customer-Owned Lighting Standards using Qualified Electrical Workers;
2. Leave a recommended #10 AWG Black wire and a #10 AWG White wire of sufficient length for the Company to perform the final connections to the company's secondary network;
3. Provide a #4 AWG stranded copper conductor with sufficient length to connect to the pole mounting equipment grounding conductor (when available) or to the secondary system neutral.



Narragansett Electric Co. Guidelines for Customer-Owned Street Lighting Installation and Maintenance

4. Install the physical disconnect device to be installed and ready prior to making the final connection to the secondary conductors on new or relocated lights.

For new customer-owned street lighting attachments or the relocation of existing street lights sourced by overhead equipment, the Company personnel shall perform the final service connections. The Company will assess the applicable Lighting Service Charge per the Company's Terms and Conditions for Distribution Service and referenced in the Company's Attachment Agreements.

New or Relocation Lighting Requests - Underground

For new customer-owned street lighting attachments or the relocation of existing street lights sourced by underground equipment, the customer must submit the appropriate Company forms provided in the Attachment Agreements prior to the Company personnel performing the required field survey to locate and provide an applicable electrical service point. Following the customer's installation of the equipment per the Company's Customer-Owned Lighting Standards, which recommends #10 AWG Black and White wire of adequate length and a required #4 AWG stranded copper conductor to be installed to the specified ground assembly provided by the customer, the Company would perform the supply connections at the service point.

For new customer-owned street lighting attachments or the relocation of existing street lights sourced by underground equipment, Company personnel shall perform the final service connections. The Company will assess the applicable Lighting Service Charge per the Company's Terms and Conditions for Distribution Service as referenced in the Company's Attachment Agreements.

Lighting Removal Requests

In the event a customer determines a light is no longer needed, the customer may remove the lighting equipment from the pole or other Company facility. The customer will be responsible for disconnecting the existing source and neutral conductors to the light and making the circuit electrically and physically safe. Given that the appropriate notification and timeframes are provided to the Company by the customer per the Attachment Agreement, and upon notification of the customer's removal of all street lighting equipment, the Company will visit the location and remove the remaining connections from the secondary network. At that point, electric service billing for that location will be terminated following the billing of the applicable Lighting Service Charge per the Company's Terms and Conditions for Distribution Service for removal of the connection per each service connection location.

Contact Us

In the event that a Qualified Electrical Worker performing work on behalf of the customer is presented with a situation that may require the Company's assistance, please do not hesitate to contact a Company representative before performing or continuing the work. Be advised, however, that the Company shall perform work requests in accordance with the applicable provisions of the Company's Terms and Conditions for Distribution Service.