

Electric Service Delivery Process

Facilitating interconnection of electrification applications

MA | August 2024

We are experiencing a high volume of inquiries and requests related to large-scale electrification of heat and transportation for commercial buildings and residential complexes. This document is intended to provide guidance to those customers and developers who are requesting more than 200kW (typically greater than 800 amps, three phase) through our Company's service delivery process.

Pre-Application Process

Once a customer or developer understands their load requirements and those load requirements are expected to exceed 200 kW, **please reach out to us BEFORE submitting a work request. Call 1-800-375-7405 and request that a Step Zero Inquiry Order be created.** You will be asked to provide a.) the proposed service location, b.) load requirements and c.) approximate date service will be needed.

You will receive confirmation from us within five business days that the Step Zero Inquiry has been assigned to a company engineer. The Company will then confirm, within 21 business days, whether there is readily available capacity to serve this load or whether more analysis will be required. If there is readily available capacity*, you will be encouraged to establish a Work Request (at the same aforementioned number) and provide a load data sheet, one-line diagram, site plan and easement information to the Company.

If there is not readily available capacity and/or if the applicant is interested to understand how long it may take and/or how much it might cost to provide service, we will identify the fee and duration to perform the requisite analysis. In general, the more detail the customer requests, the longer the analysis will take and the costlier it will be.

It is critical that you have a good understanding of your load requirements as this is fundamental to the company being able to analyze, engineer, and design the service. Upon receipt of a Step Zero Inquiry Order or a formal Work Request, the Customer will be assigned a Job Owner. The Job Owner will act as a single point of accountability for the Customer and help them navigate the end-to-end service delivery process. The Job Owner will contact the customer within 5 Business Days.

For additional information on how to apply for service and our service requirements, visit the electric portal at [Home \(site.com\)](#).

**Disclaimer: Peak loads and load commitments made on the National Grid's distribution system are dynamic and, as such, we may need to modify its initial disposition from the pre-application process as loading on its system changes. National Grid does not formally reserve capacity for a customer or developer until a formal work request has progressed to its engineering stage.*

Cost and Timing Considerations

With electrification loads (electric vehicles & heat) typically being much higher than standard loads, we may not have adequate capacity readily available at a given location. And it takes time (i.e., months and in some cases, years) to engineer, design, permit and construct the necessary system modifications to provide that additional capacity. Likewise, the cost of the system modifications can be considerable and, in many situations, chargeable to the customer. Thus, it is important to reach out to the Company early to better understand these variables rather than make assumptions that the Company has a quick and inexpensive means of providing service.

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Step Zero *continued*

Impact of Distribution Voltage on Load Requests

National Grid operates two general levels of distribution voltage (5kV class and 15kV class). Each level has specified limitations on project load requests:

- **4.16 or 4.8kV** - Electrical demands of up to 1,000kW (1MW) are allowed (e.g. ~3-6 DCFC ports; ~100 single-family houses with heat pumps; ~150 units of multifamily housing with heat pumps; or ~80,000 sq. ft. of commercial space with heat pumps)
- **13.2kV** - Electrical demands of up to 2,500kW (2.5MW) are allowed (e.g. ~8-15 DCFC ports; ~250 single-family houses with heat pumps; ~375 units of multifamily housing with heat pumps; or ~200,000 sq. ft. of commercial space with heat pumps)
- **>13.2kV** - Engineering will review demands in excess of 2.5MVA and respond accordingly. Demands over 2.5MVA may require primary metered 13.2kV service or service from higher voltage (sub-transmission or transmission systems).

Electric System Data Portal

For our MA developers and contractors, we created a [National Grid - Massachusetts System Data Portal](#) — an online, interactive collection of maps that provides in-depth visibility into the electric grid distribution system. The portal contains distribution feeder and substation information, including:

- Feeder ID and characteristics, such as geographic locations
- Substation source
- Planning area
- Voltage information
- Loading and available hosting capacity

We encourage you to visit [the portal](#) and use the information, along with consulting a Company engineer, to help develop your future projects.

We look forward to collaborating with you on your project.