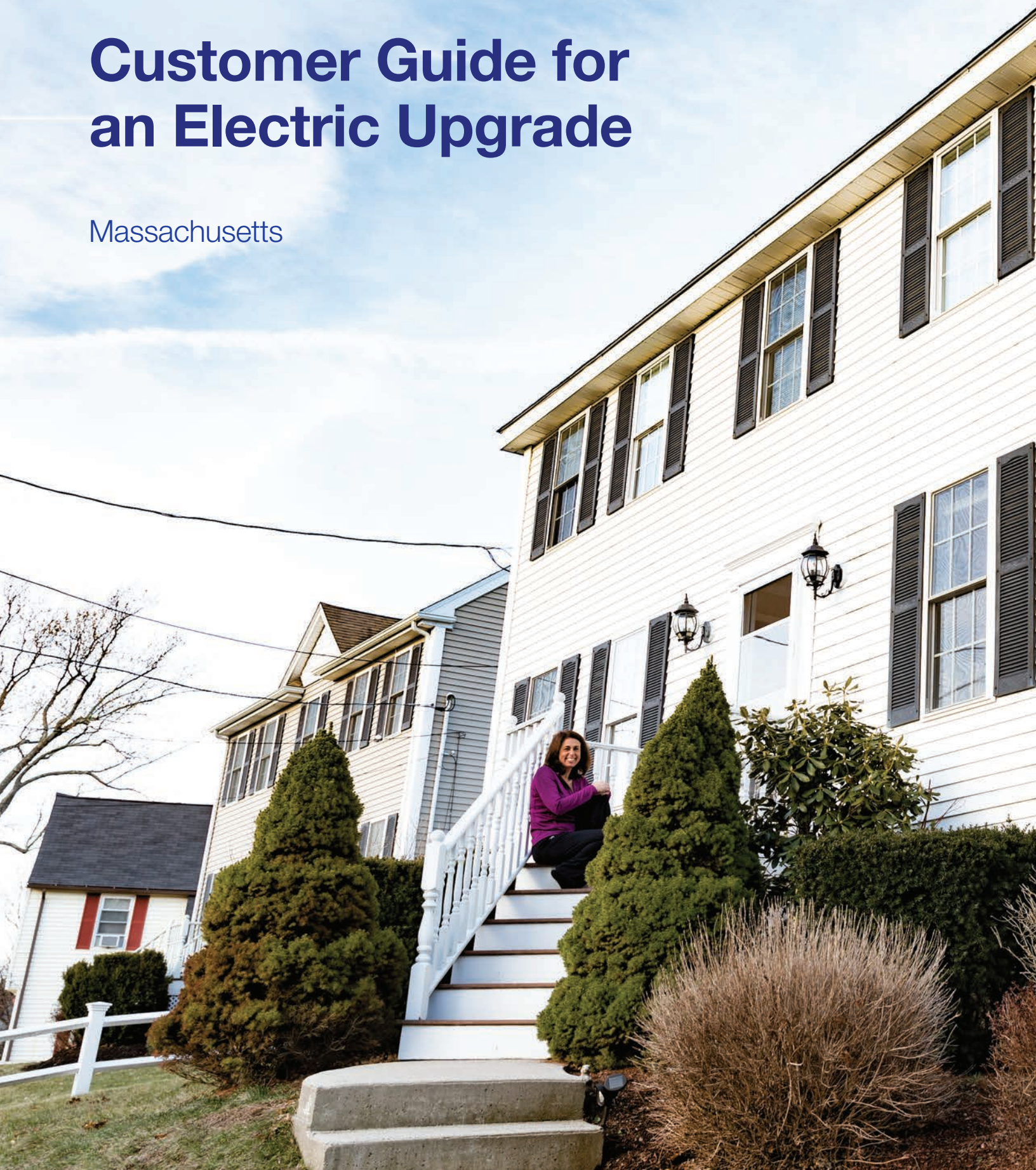


nationalgrid

Customer Guide for an Electric Upgrade

Massachusetts





Get Started with Your Electric Upgrade Project

We understand the importance of upgrading your electric service. Before you begin, we want to make sure you have all the information you need for the upgrade process, including the key phases and steps involved. This guide outlines the responsibilities for you, your electrician, and our team. It will also provide estimated timelines to help you effectively plan and manage your electric upgrade projects.

Every electric project follows a series of phases and steps. Please remember that the timelines provided in this guide are estimates and are subject to change. Factors such as project scope, specific requirements, customer and electrician responsibilities, weather conditions, and unforeseen emergencies can impact the overall timeline. Flexibility and adaptability are crucial during the process.

What is an Electric Upgrade?

To National Grid, an electric upgrade involves increasing the amount of power (amps) our company delivers to your home. We will need to review your service and ensure we can safely provide additional power for your home.

Please note that replacing only the electrical panel or wiring does not increase your home's power capacity and will not be considered an electric upgrade. If you've experienced any fires, outages, or burnt panels near your electric system, please contact a licensed electrician to assess what repairs are needed before considering a service upgrade.

Defining Your Upgrade Needs

Before submitting a request for an electric upgrade, it's important to work with a licensed electrician to confirm whether an upgrade is necessary and what type of upgrade is appropriate. Your electrician can:

- Assess your panel's capacity and your home's electrical load.
- Provide recommendations on the appropriate panel size and any necessary upgrades.
- Coordinate with us to confirm the scope of work to help determine the type of upgrade required, which impacts the timeline, process, and any additional steps involved.

It is important to confirm the full scope of the upgrade before submitting your request, which is critical to avoid delays, unnecessary back-and-forth, or changes later in the process.

Common Terms You Might Hear

Amperage (amps) – your electric panel's capacity.

- To identify the capacity of your panel, it is best to contact a licensed electrician.

Voltage (volts) – the force that pushes electricity through your wires.

- Think of it like water pressure. The higher voltage means more energy can be delivered to your home.

Wattage (watts or kilowatts) – the total amount of electricity being used by all your household appliances.

Load – the amount of electrical power your home consumes and can be measured in watts or kilowatts.

Electric Panel (Breaker Panel) – the main control center for electricity.

- If you upgrade the panel's capacity (e.g. from 100 amps to 200 amps), you must submit an upgrade request to us.



Common Questions to Ask Your Electrician

Before starting your upgrade, talk to a licensed electrician about your current and future needs. Discussing your long-term plans and asking the right questions will help you avoid costly changes later and ensure your home is future-ready.

What is my current service size (amps)?

Tip: This tells you how much electricity your home can handle today and whether it's enough to support your future energy needs.

Can I just replace my electric panel or do I need to upgrade my electric service?

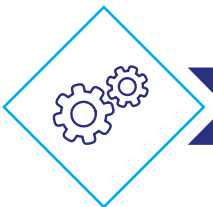
Tip: Sometimes replacing your panel might be enough but please consult your electrician for the best option based on your current electrical needs.

If I need an upgrade, what should I upgrade my electric service to?

Tip: Share any future plans such as adding new electric appliances, EV charger, heat pumps, or solar panels with your electrician to ensure they size your upgrade correctly.

Are there any rebates or incentives available to help pay for the upgrade?

Tip: There may be programs available through Mass Save® that offer financial assistance such as rebates, incentives, or interest-free loans for electric upgrades. Visit [Mass Save webpage](#) to see what programs you qualify for.



Different Types of Upgrade Projects

The type of electric upgrade you need will affect the timeline, process, and costs. After your electrician determines your requirements, they will work with us to confirm which category applies to your project. For more details on the connections timeline, you can view our [Duration Table](#).

Type	About	Timeline	Cost
Simple Upgrade	Most upgrades to residential homes involve increasing your home's electrical capacity without any need for changes to our infrastructure.	Timing varies as it depends on the electrician. Only a simple service connection and/or meter installation is required of National Grid.	No charge from National Grid. You will only need to pay for your electrician's work.
Complex Upgrade	We may determine that your upgrade is more complex and requires construction and changes to our infrastructure to connect your service to our system.	The complexity of the upgrade and site conditions will determine the length of time to connect your upgrade. The process may require easements and permits before we can begin construction, which could extend the timeline.	For these types of projects, there may be additional costs from National Grid.
Full Rebuild & Major Upgrade	This is for complete home rebuild or major renovation that involves demolition. After rebuilding, your electrician will need to submit for new service.	Dependent on your own construction timeline and the type of upgrade needed	If you need temporary service during construction, there will be a fee. When connecting service, you will need to submit a request for new service, which might have additional costs.



Roles & Responsibilities

We will work closely with your electrician to make this process as smooth as possible. Here is what each party is responsible for:

1. You (the customer)

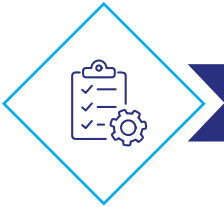
- a. Hire a licensed electrician
- b. Work with your electrician to identify the type of upgrade you need
- c. Send in payment (if required for complex projects)
- d. Grant or obtain easements for installation (if required) and complete Customer Info Form to support drafting the easement document(s)

2. Electrician

- a. Correctly size the electric upgrade for the home
- b. Provide quotes for their work
- c. Install new electric appliances (if applicable)
- d. Submit an application to National Grid to request an electric service upgrade
- e. Apply for permits and schedule inspections with local municipality for the upgrade
- f. Coordinate with National Grid to disconnect / reconnect service and set any new meter (if needed)
- g. Build electric service to National Grid's standard, as listed in Specifications for [Electric Installation](#) (ESB750), and label sockets for meter installation

3. National Grid

- a. Review application for electric upgrade for completeness
- b. Assess our infrastructure, determine complexity, and design the project
- c. Provide a quote for the project and invoice customers for complex upgrade (if required for complex projects)
- d. Complete any necessary construction to the infrastructure (if required for complex projects)
- e. Disconnect and reconnect power
- f. Install new meter (if applicable)



Process for Simple Upgrade

1. Gathering Technical & Property Details

Once you have worked with your electrician to determine the right size for your upgrade, complete our [Electric Service Request Form](#) to begin your new project. Confirming the full scope of the upgrade and ensuring all information is accurate information when submitting your request can avoid delays or changes. There are three ways to submit the form:

a. Online: Access our [user-friendly portal](#) and submit your form electronically.

b. Email: Send your form to workrequest@nationalgrid.com

c. Phone: To provide details over the phone, please call **1-800-375-7405** Monday through Friday between 7:30 a.m. and 4:30 p.m.

Once we receive your request, your project will be assigned to a Job Owner who will be your main point of contact throughout the entire project.

2. Design

A Distribution Designer may be assigned to your project and work with your electrician to develop a comprehensive plan for the upgrade that ensures efficiency, reliability, and regulatory compliance. The Distribution Designer will assess existing conditions and tailor a design based on your specific needs to ensure a safe and reliable service following the simple upgrade.

They will determine if a site visit with you or your electrician is necessary. If needed, they will schedule the site visit. It is important to have all key decision makers present during this meeting to ensure that the design meets your needs and adheres to the required standards.

3. Scheduling of your disconnect and reconnect

Your electrician is responsible for scheduling time with National Grid to disconnect and reconnect power to ensure safety during the upgrade. Your electrician is also responsible for applying for any required permits and scheduling an inspection with the local electrical inspector.

4. Upgrade

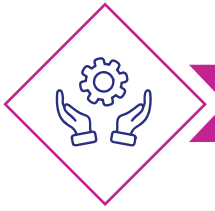
Before the upgrade work begins, our field crew will disconnect the power to ensure safety. Your electrician will complete their portion of the upgrade work. Please note, there might be a temporary loss of power while the electrician does the upgrade.

Before restoring your service, we must obtain a municipal inspection from the local electrical inspector who has jurisdiction in your area. It's the responsibility of the electrician to request this inspection and we cannot proceed with connecting your service until we receive an approved municipal inspection. The licensed electrical wiring inspector will then notify us once the upgraded service has passed the inspection.

After confirmation of the inspection, our field crew will return to make final connections to energize your service and complete any required metering installations or maintenance.

5. Completion

Congratulations! Your electrician will handle the remaining steps to complete your upgrade.



Process for Complex Upgrade

Gathering Technical & Property Details

Once you have worked with your electrician to determine the right size for your upgrade, complete our [Electric Service Request Form](#) to begin your new project. Confirming the full scope of the upgrade and ensuring all information is accurate information when submitting your request can avoid delays or changes. There are three ways to submit the form:

a. Online: Access our [user-friendly portal](#) and submit your form electronically.

b. Email: Send your form to workrequest@nationalgrid.com

c. Phone: To provide details over the phone, please call **1-800-375-7405** Monday through Friday between 7:30 a.m. and 4:30 p.m.

Once we receive your request, a dedicated Establish Service Representative (ESR) will guide you through the process and connect you with your Job Owner, who will be your main point of contact until the end of your electric project. The Job Owner will communicate with you throughout the project and may request a Proposal for Electric Service (PES) package depending on your project scope.

Design

During the design phase of your electric connections project, our goal is to develop a comprehensive plan that meets your needs and complies with regulations. We want to ensure that the design aligns with your requirements and provides safe and reliable service.

To begin, a Distribution Designer will be assigned to review your project and determine if a site visit with you or your electrician is necessary. If needed, your Distribution Designer will schedule the site visit. It is important to have all key decision makers present during this meeting to ensure that the design meets your needs and adheres to the required standards.

During the site visit, the Distribution Designer will ensure the customer requirements are aligned with the Proposal for Electric Service and will collect information required to conduct a thorough analysis and complete the design.

After the site visit, they will determine an estimated design completion date, analyze the site and consider factors such as load calculations, voltage requirements, potential easement requirements, potential permit requirements, and equipment and metering placement. This analysis will help in creating a tailored design that optimizes cost, efficiency, safety and reliability.

Missing information, lack of timely response for additional information and changes to the characteristics of the proposed electric service during the design phase may cause unexpected delays to your project. Unnecessary time lapses and rework can be avoided with a clear and complete scope of work and timely communication.

Following the conclusion of the design phase, you can expect to hear from your job owner with the details of your service agreement, cost, scope of work involved and responsibilities.

Please note that in some cases, you may be responsible for securing easements or permits based on your project requirements. Your Distribution Designer or Job Owner will inform you if this is necessary and will guide you through the process.

Obtain Rights & Customer Agreement

Before we can move forward with scheduling on our end, it is essential to complete preliminary requirements. Pre-requisites could vary based on your project, but some might include: signing the service agreement, obtaining permits, securing easements, and making full payment.

Rights

a. Permits: Please secure all of the required permits and approvals that were identified during the design phase. This may include signing off on agreements from neighbors or local authorities if your project affects shared infrastructure. Remember, full payment of any fees or contributions must be made before we progress to the scheduling phase.

b. Environmental Rights: It is your responsibility to obtain all environmental permits for the proposed electric/gas service. This can include, but is not limited to, obtaining approval from the Local Conservation Commission. Documentation of secured environmental permits and agency approved site plans shall be furnished to us upon request. Additionally, you are responsible for the management and disposal of any excess soil that may be generated from our work on private property.

c. Easements and Right of Way: If your installation requires a new easement or an amendment to an existing easement, you will be required to sign the easement document provided. Sometimes, projects require special permissions for access or the use of land owned by another. If this applies to your project, it is your responsibility to help secure these easements such as obtaining signatures. We will be your guide along the way to let you know what is required and will help ensure all documentation is in place.

d. Coordination with Other Utilities: If your installation involves complex setups like pole installations, we will coordinate with other utilities to ensure everything is aligned and compliant.

Agreements

a. CIAC (Contribution in Aid of Construction) and Project Costs: For projects requiring a Contribution in Aid of Construction (CIAC), we will calculate the necessary costs associated with building your electric service. If applicable, your dedicated Job Owner will discuss this with you in advance so there are not any surprises.

- You will receive a service agreement when the CIAC is calculated. Once we receive the signed service agreement, you will receive an invoice. Please follow the payment instructions outlined on the invoice and make your payment promptly to avoid delays. **Please note that if your signed service agreement or payment is not received within 90 days (about 3 months), we will need to recalculate the CIAC and start this process over, which can impact the timeline of your project.**

Construction

Once necessary rights and agreements are completed, the scheduling and construction phase of the project commences, which involves:

1. Customer Trench Inspection: Many upgrades do not require a trench inspection. If your project does require a trench inspection, you may be required to install, at your cost, the underground civil infrastructure needed on your property. After installation and approval by our trench inspection, you will turn that installation over to our team. NOTE: National Grid may need to install a pole for you to complete your upgrade. The riser pole cannot be set until signed easements/licenses, environmental rights, service agreement/CIAC are obtained from you. Delays may impact the installation of the riser pole and completion of any municipal wiring inspection.

2. National Grid Civil Infrastructure in the Public Way: Most upgrades will not necessitate the installation of civil infrastructure in public areas. However, if you are connecting a service to an underground distribution system in the public way, we will install the necessary civil infrastructure for your connection. Provided that all rights are secured and the service agreement and CIAC, if applicable, are obtained, we may proceed with the installation of the underground civil infrastructure before you are ready for service.

3. National Grid Construction Pre-Checks: This is a crucial step in the process. Our goal is to address any concerns and ensure that the site meets all the requirements for safe and reliable construction. Our field supervisor will review the scope of work and conduct a field visit to the site to ensure it is prepared and ready for construction. If any issues are identified, we will communicate with you and discuss the necessary changes needed to progress your project to the construction phase. **Important: Site readiness issues such as other construction vehicles, equipment, and/or other obstacles can delay the start of construction.**

4. National Grid Overhead and Underground Construction: Once the pre-check confirms that the site is ready for construction, your project will be scheduled for the initial construction phase. Equipment and resources are scheduled to ensure that construction can be carried out accurately, safely, and in compliance with regulations. Type of construction activity will vary depending on customer's project site, electrical needs, and the work required in the nearby public way to connect to infrastructure on customer's site.

5. Customer Municipal Wiring Inspection: A municipal wiring inspection is required before we can energize your service. A licensed electrical inspector must approve your trade ally's electrical installation. Final connections and metering installations cannot proceed until confirmation is received. The electrician upgrading the service is responsible for requesting this inspection by contacting a licensed electrical inspector. The licensed electrical inspector will then notify National Grid once the upgraded service has passed the inspection.

6. Final Connections and Metering Installations: Once we receive notification that the upgraded service has passed the municipal inspection, our crew will be scheduled to make final connections to energize the electrical service. If the construction crew on-site is authorized to install your meter(s) based on the scope of your project, they will do so. However, if they are not authorized, a qualified metering technician will be scheduled to complete the meter installation(s). Once metering installations are completed, the electrical service is fully energized.

Project Completion

The actual timeline from the initiation of upgrading residential service to the meter installations is influenced by numerous factors. The complexity of your project, the availability of resources, materials and equipment, weather conditions, prior scheduled work, unforeseen emergencies, and customer driven delays can all impact the estimated timeline. We will do our best to keep you informed of any changes or delays that may occur.

Delays in providing timely information, as well as changes to your original request during the design phase or afterwards, will have an impact on your project's schedule and potentially cause delays in installing your service.



Process for Full Rebuild of your Home

It is critical that before you submit a service request to National Grid, you work with your licensed electrician to determine the plan for your rebuilding for your home. If your project involves demolishing the existing home, you can use the [Demolition Form](#) to request that services be disconnected before demolition begins. If you need power during construction, you can also request temporary service for a fee using this [Temporary Service Form](#).

Once construction is complete, your electrician will need to request a new permanent electric service. For more details about the process for getting new service, visit our [New Electric Service page](#).

ADU (Accessory Dwelling Unit)

If you have an ADU, which is a secondary residential living space, please refer to this [document](#) for more details on the requirements and process.