

# ELECTRIC SERVICE UPGRADE/ NEW ELECTRIC SERVICE

## Frequently Asked Questions:

### ***Do I need a permit to upgrade my current electric service or for a new service?***

Yes, a permit is required for all new electric services and service upgrades. The fee for a new electric service is included with the new construction building permit; no separate fee is required. The fee to upgrade an existing electric service is \$50.

### ***Do I need a licensed electrician to do my work?***

No, but we highly recommend a qualified person to do the work.

### ***Will the electric work be inspected?***

Yes. Local power companies will not connect your meter until the electric service has been inspected and approved by the Building & Zoning Dept.



### ***How do I get started if I want to upgrade my current electric service?***

- Contact a qualified electrician to go over the extent of the upgrade.
- If the electric service is underground, call the utility locating company J.U.L.I.E at 811 or log on to [illinois1call.com](http://illinois1call.com) to have all underground utilities marked.
- Complete and submit a Limited Use Permit application for an electric service upgrade. You will need to have the name and contact information of the person or company doing the work.
- After the permit is approved, pay the \$50 fee.

### ***Is there anything else I should know?***

Contact the power company to arrange a date for them to disconnect and an estimated time to reconnect.

The day before the work will be done, contact the Building & Zoning Dept. at (618) 667-8734 ext. 4 or [buildingzoning@troyl.us](mailto:buildingzoning@troyl.us) to schedule a reconnect inspection. Leave a message that includes the address, type of inspection and approximate time requested.

Please be aware that inspectors are not always available for late afternoon inspections, and the electric utility company will not reconnect the service without their approval.

Review the Electric Service Installation Guide (on the back of this page) and contact the Building & Zoning Dept. with any questions or concerns.

# ***Electric Service Installation Guide***

**All electric services for new construction or electric upgrades MUST have a meter base with a bypass as approved by the electric utility provider.**

## **Outside Service:**

- Minimum of 200 amps for new construction; 100 amps for upgrading
  - Entrance cable of adequate size: 200 amp-3/0 wire, 2½" conduit underground or 2" conduit overhead; 100 amp-#4 wire, 1¼" conduit
  - Neutral cable unbroken through meter box
  - Meter can must be properly bonded
  - Adequate bonding wire and ground rod: 200 amp-#4; 100 amp-#6
  - Overhead service must have proper clearance: 10' over pedestrian traffic; 12' over driveways
- Note: Aluminum wire will NOT be permitted*

## **Inside Service:**

- Panel box equipped with single main disconnect
- Rigid conduit to service panel
- Neutral buss is bonded to the panel box
- Minimum size of wire is 12-gauge copper
- Ground terminates at neutral buss
- All circuits shall be legibly labeled

## **Branch Circuits:**

- Minimum of two small appliance circuits shall be provided in the kitchen
- Major appliances on dedicated circuits (i.e. refrigerator, microwave, freezer, washer, furnace, sump pump)
- Furnace provided with service switch
- Limit of eight devices per circuit
- All circuits terminate in approved boxes
- Splices contained in approved junction boxes with covers
- Ground fault protection (outside receptacles, kitchen, bath, unfinished basement, garage)
- Arc-fault circuit interrupters installed in dwelling unit bedrooms

***Installation shall comply with the requirements of the latest adopted edition of the National Electrical Code NFPA #70***