What Can I Do?
Electrification and Fixer Upper Fun—Step 4

The following editorial is by no means an expert opinion, it is merely a personal process shared in the hope of making these projects a little less confusing, cumbersome and costly for those also on this path. The rewards of lowering emissions and eventually utility bills while increasing your home's structural resiliency really are worth the cost and effort and rehabilitation of structures is a much better alternative for lowering emissions than new construction. Please find preceding articles in the April, May and June editions and reach out to the Sustainability Division to relay any of your own learnings on this topic so that we can add it to the electrification themed articles to come: sustainability@santafecountynm.gov.

–Jacqueline Beam

An electrical panel upgrade was the final step toward electrification (for now) on my list. All my electric appliances were ordered and are on their way; several new 220v outlets were needed as a result of the appliance additions. In anticipation of installing a future EV charging port and solar, my electrician reported that my current 100-amp panel would not be sufficient. An upgrade from 100 amps to 200 amps was necessary given my current and anticipated usage.

Prior to scheduling the electrical work, I contacted PNM as recommended by the electrician, to schedule a meter spot appointment. PNM provides an online process to apply for a meter upgrade and will send an inspector to your home who will assess your upgrade needs to include meter placement. Fortunately, my electrician was experienced with the process and took over the application submittal after the initial visit was completed. Unfortunately, my meter is directly under a canale. This location hasn't been a problem to date and my home was built in the early 90's. It certainly appeared as if the meter had always been in the same location yet PNM stated I would need to move the meter 3 feet away from the down spout---or the water would have to be redirected. I opted for adding a drainage system that diverted the water over 3 feet away to a rain barrel. The fix may not be pretty but it met PNM's requirement and allowed the upgrade work to begin.

Lessons learned:

- Be sure to contract with an electrician who is familiar with the upgrade process and working with the Construction Industries Division (CID) and PNM. I met with three different electricians, all licensed and insured, yet, each contractor had varying degrees of experience with electrical panel upgrades. If the electrician doesn't know the path or have good communication with CID and PNM, it will likely equate to higher costs and missteps.
- PNM may require updating underground lines connecting to the transformer. (PNM wanted my lines replaced which were located 4 feet under the dirt surface near the meter and according to PNM, required replacement on my dime.) If so, this will significantly increase costs as holes will need to be dug to swap out the lines and conduit. If you can negotiate with your electrician ahead of time, it's always cheaper to hire someone else to dig for standard rates, rather than paying electrician rates!

- If PNM says “no” to a cheaper option that you or your electrician propose, push back and keep asking for options that won’t break the bank. (PNM initially stated I would need to move my entire meter 3 feet which was definitely going to break *my* bank!) Easier solutions may be possible if you keep asking and it never hurts to try. Each inspector can vary in their approach and budget empathy capacity.
- Make sure to schedule your electrical upgrades during a time when weather is good and not too hot or cold. During meter replacement your electricity will need to be off for several hours and could be off and on for several days depending upon the complexity of the project.
- Rebates and Tax credits for electrical panel upgrades are substantial, especially if combined with a heat pump installation.
- The 2020 National Electrical Code (NEC) is the current requirement for New Mexico and includes arc fault circuit breakers as a mandatory requirement for new construction and upgrades. Arc fault breakers are quite a bit more costly than standard breakers.
- If you have other needed updates to wiring, this is a great time to consider adding in those projects as well, while the electrician is in the walls and mapping out the voltage and usage requirements.

That’s all for now folks! After four and a half years and multiple phased efforts, my journey to transition to all electric is 95% realized! My electrical panel is upgraded and ready for solar and an EV charging port, and my new, all electric Energy Star rated appliances are humming along nicely. The only item left on my list is to replace my natural gas hot water heater manufactured in 1991, with an electric alternative. My plan is to replace this last item with on-demand electric water heaters when I remodel my bathroom in the not too distant future. For now, it’s time to enjoy the new upgrades, take a break from plaster dust and get outside to finish that raingarden!