



UNDERGROUND DISTRIBUTION & SERVICES SPECIFICATIONS

Historically, the majority of the HMP&L electrical system has consisted of overhead distribution equipment and conductors, and overhead low voltage service delivery equipment and conductors. However, the industry has been gradually changing to underground services as the preferred service installation for most types of customers, and especially power consuming commercial and industrial customers. To be consistent with industry standards, HMP&L has begun to install underground services and has developed this document as a “standard” for underground distribution and services. This document describes the conditions under which new underground services will be installed and details on how existing customers can convert overhead service to underground, if they desire, or repair existing underground service.

The specifications are applicable to all Henderson Municipal Power & Light (HMP&L) electrical customers either installing new underground electrical service, converting existing overhead electrical service to underground electrical service, or repairing an existing underground conductor failure. The specifications are applicable to the home owner/property owner and/or the developer/contractor employed by the home owner/property owner, herein referred to as the customer.

Customer shall be responsible for installing all substructures on customer’s property to meet or exceed HMP&L standards. Commercial customers will be required to submit a load sheet to HMP&L from which HMP&L will determine the size of the conductor and transformer. The size of the main breaker will determine the size of the conduit which will be required by the customer. HMP&L will provide the specifications, including size and schedule, for the conduit prior to the start of the project.

Customer shall be responsible for having the site to final grade before starting any of the following work: trenching in the conduit; backfilling the trench as well as any settling of the trench and compacting; installing transformer vaults, secondary pads, and concrete pads for larger pad mount transformers. Backfilling shall not be performed until HMP&L has inspected and approved all conduit depth. Backfill shall consist of native fill free of organic material and rock no larger than 2 inches in diameter. Primary conduits shall have a minimum coverage of 42” and a maximum depth of 60”. Secondary conduits shall have a minimum coverage of 24” and a maximum depth of 36”.

Customer shall be responsible for providing a pull line ($\frac{3}{4}$ inch 2500 lb mule tape) in all conduits on the site. The conduit shall be free of dirt, rocks, or other obstructions which could prevent, hinder, or harm the installation of the electrical wire. The conduit shall only be used for the HMP&L electrical service. All conduits shall have bell ends and bushings installed by the customer. HMP&L will be installing 1/0, 4/0, 350, 500, & 750 aluminum conductor, as required.

HMP&L will pull the primary and secondary wire on the site. The secondary wire will be pulled up to 125 feet at no charge, but any wire past the 125 feet will be billed to the customer. HMP&L will pull the service conductor into the meter can, but will not make the connection in the meter can.

Customer shall be responsible for hiring a licensed electrician, at their expense, to make the connection in the meter can.

On larger 3 phase services, the customer shall be responsible for hiring a licensed electrician, at their expense, to install a CT meter cabinet on the building as well as to mount the HMP&L furnished meter can and 1 ¼ inch conduit for the metering cable. HMP&L will provide, at no charge, the CT's for the cabinet, but the electrician will have to mount them in the cabinet. HMP&L will pull the secondary wire into the CT cabinet and the electrician will be responsible for landing it.

RESIDENTIAL CUSTOMERS:

If a current residential customer wants to convert an existing electrical service from an overhead service to an underground service, HMP&L shall charge the customer \$250 for the conversion. The customer shall be responsible for hiring a licensed electrician, at their expense, to change the meter can, dig in the 2-1/2-inch conduit, and install a pull line. HMP&L will pull the wire and install the new conductor.

If the underground conductor goes bad for an existing direct buried underground residential single service customer, the customer shall be responsible for hiring a licensed electrician, at their expense, to dig in a new 2- 1/2-inch conduit. HMP&L will install the new conductor at no charge.

COMMERCIAL – INDUSTRIAL CUSTOMERS:

If a commercial or industrial customer wishes to convert an existing electrical service from an overhead service to an underground service, HMP&L will discuss the conversion with the customer, determine the customer's responsibilities, and provide the customer with an estimate of the HMP&L charge for the conversion.

If the underground conductor goes bad for an existing commercial or industrial customer, the repair will be reviewed by HMP&L to determine the extent of the repair, the customer's responsibilities, and if there will be a charge to the customer for the repair.

Any questions regarding the specifications should be addressed with the HMP&L Transmission & Distribution Department. The Transmission & Distribution Department can be reached at 270-826-2726 by selecting option #3 when prompted.