



We would like to take this opportunity to remind you of a few important requirements when applying for connections to our distribution system;

1. **Subdivisions- check if they are designed for 3 phase or single phase supply**

More and more rural subdivisions are being designed for 3 phase connections to each lot. It is therefore important when quoting customers for wiring of new supplies in rural or rural residential areas to please contact MainPower to ascertain whether the supply will need to be single or 3 phase. We have had a number of instances where the service cable and property have been wired for single phase and the connection point is designed as 3 phase. In these instances we will not allow connection until the installation has been upgraded to 3 phase or alternatively, but not preferred, the transformer is upgraded to allow for the single phase load. Omitting to determine this important point can result in increased costs for the customer.

2. **Supply fusing and balance**

The MainPower standard supply is either 63 Amps single phase or 30 Amps three phase. We expect all three phase supplies to be balanced as close as possible to 20 Amps per phase in order to maximize the distribution system operation.

3. **Pump size and tariff allocation**

Water pumps up to 3.5 kW motor rating can be connected to any Customer Category. Water pumps sized greater than 3.5 kW motor rating will be classified as either Irrigation or Commercial depending on the predominant use.

4. **Plans and Connection Forms**

Our connection application form requests the inclusion of a plan. This plan is very important and often lack of detail in this area results in delays in the processing of the application. Please ensure some emphasis is placed on this aspect of the application. In particular we require;

- (a) offset measurements from boundary to metering point
- (b) offset measurements from boundary to cable location in road reserve
- (c) offset measurements from boundary to cable location inside property
- (d) cable size

5. **All Temporary Supplies to be Metered from 1 February 2010**

Effective 1 February 2010 all temporary supplies installed within the distribution system owned and operated by MainPower will be metered. This will bring MainPower into line with the direction being taken by the majority of other electricity supply companies in New Zealand.

- (a) We remind all electricians that temporary supplies are temporary and for construction purposes only
- (b) Remember that temporary supplies provide a 30Amps per phase supply only
- (c) Even when temporary supplies are metered you will need to make a second application for the permanent final connection as per the current procedure.

6. **Motor Requirements**

- (a) MainPower requires that a total harmonic current distortion of less than 10% applies to motors of capacity 7.5kW or greater.
- (b) MainPower also requires, in all cases, that the **true** power factor is greater than 0.95.

7. **Permanent Connections - Approvals and Implications on the Distribution System**

- (a) Approval of a temporary supply connection does not constitute approval for a permanent connection nor does it guarantee approval of a permanent connection at the same location as the temporary supply location.
- (b) A temporary supply can often be approved based on the existing network configuration however it does not necessarily follow that the existing network configuration will be appropriate for connection of the permanent load. It may depend on the specifics of the permanent connection loading.
- (c) Therefore we suggest that you discuss with us the specifics of the intended permanent connection loading at temporary supply time.
- (d) Where network extension or upgrade is required to allow connection of a new permanent connection this work will need to be completed before the customer can connect therefore the earlier you discuss the nature of the permanent connection the better lead time is available for any network extension or upgrade if required.