



ACN 064 651 109

To all Registered Electrical Contractors:

The aim of this *Tech Talk* is to advise you of important metering changes applicable from 1 January 2006 and to remind you of some work practices which may assist you, your employees and Powercor to provide an improved service to our mutual customers.

Ken Greenway
CONNECTION STANDARDS MANAGER

New "Interval Meters"

Introduction

The implementation of electronic "Interval" meters from 1st January 2006 will impact on wiring of meter panels for customers requiring multi-phase metering, climate saver metering, and all metering installations that have previously incorporated a time switch.

The preparation and wiring of meter panels for single phase single rate and single phase "Winner" type hot water installations are unaffected by the use of interval meters.

Background

The Essential Services Commission (ESC) has mandated the introduction and rollout of Interval Meters in Victoria from 1st January 2006 to nominated classes of customers.

To comply with the mandate, from 1st January 2006, interval meters will be installed for multi-phase metering and 1-phase off-peak metering arrangements as follows:

1. To all new customers; and
2. For all replacement meters, including those replaced due to faults and metering alterations.

A meter exchange program is also planned to commence in 2007 for many existing customers.

Further information on the Rollout Interval Meter final decision and timetable can be obtained from the ESC website at <http://www.esc.vic.gov.au/electricity819.html>

Interval Meters

Interval meters:

- Are electronic in operation and contain an internal time clock, superseding the need for a separate time-switch.
- Record KWH consumption in each half hour period, unlike other meters which only record the aggregate KWH consumed between meter reads. Therefore consumption in a 24 hour day comprises of 48 half hour KWH registrations.

It is understood interval meters are being introduced to enable electricity Retailers to purchase and retail electricity in half hour increments at varying prices, and for customers to manage their usage with consideration to price variations of electricity purchased from the Retailer.

Load Control

For new installations or metering alterations, conditions for switching controlled loads such as hot water, storage and floor heating and two rate metering have changed. Load control under the new metering arrangements is restricted to the following:

1. Domestic installations and occupancies with a single phase 240V supply and eligible “off peak” storage hot water services will be fitted with an interval meter equipped with a ≤ 30 Amp HW switch and register. The meter for this service is similar to the current single phase electronic “Winner” meter.
2. The following optional relay switching (synchronising) service, and its fee and connection is dependent upon the Regulator’s approval, and wiring conditions being met:

Upon application, installations and occupancies other than Domestic installations and occupancies with a single phase 240V supply and eligible hot water service may be provided with a single phase ≤ 2 Amp 240V relay switching service timed to co-ordinate (synchronise) with Network Tariff times. Fees will apply for the provision of this service.

Wiring arrangements for this service includes requirements for the customer to install a ≤ 2 Amp protection device on the meter board and to arrange for the load to be controlled through a customer’s relay. The relay is normally located downstream of a main switch and protective devices at the switchboard.

Meter Panel Preparation

It is acknowledged this advice of the changes is short notice and some un-connected and installed meter panels will have been prepared to 2005 standards.

As interval meters and the preparation of meter panels to suit is required from 1 January 2006, RECs with un-connected and installed meter panels prepared to 2005 standards should contact a technical advisor for advice by calling 13 22 06.

The major impact on wiring of new meter panels will be the deletion of the use of:

- multiphase electro- mechanical meters; and
- separate time switches for:
 - Time of Use meter registers, eg, 2 rate meters; and
 - Provision of load control services, eg, control of Hot Water and Storage Heater loads.

The deletion of separate time switches also eliminates the need for time switch fuses and wiring.

Therefore the Service & Installation Rules 2005 Wiring Diagrams contained in Figures 8.9, 8.12, 8.13, 8.14 and 8.17 are now obsolete, as they contain separate time switches.

Changes to meter panel arrangements are summarised below:

a) New Customers

APPLICATION	METER TYPE
All CT Connected Customers	Interval Meter – optional relay switching service**
All Multiphase Customers*	Interval Meter – optional relay switching service**
Single Phase domestic hot water customers	Interval Meter with ≤ 30 Amp HW switch and register - similar to existing “Winner” meter. The booster element of a dual element hot water installed under this condition will continue to be connected to the meter’s hot water tariff register.
Time of Use Single Phase Customers *	Interval Meter – optional relay switching service**
<p>* Includes Climate Saver tariff – see under “Climate Saver” heading</p> <p>** Conditions apply –optional relay switching service fee and connection is dependent upon Regulator’s approval and wiring conditions being met - see under “Load Control”.</p>	

Apart from metering which may be fitted with the optional relay switching (synchronising) service, the Service and Installation Rules 2005 Wiring Diagrams, with the exception of Wiring Diagrams contained in Figures 8.9, 8.12, 8.13, 8.14 and 8.17 listed above should be used.

It is anticipated the wiring diagrams for the optional relay switching service will be available on the Powercor website www.powercor.com.au prior to 1 January 2006.

b) Existing Customers:

Interval Meters will be installed where an existing customer has their metering replaced due to fault situation, alteration or meter exchange programs.

Under these circumstances any existing load control applicable to sunsetted network tariffs such as hot water and storage heating will be re-installed, provided the customer remains on the same network tariff. However, where an existing customer requests a network tariff change, the metering will be required to meet the same standard as a new customer.

It is anticipated the diagrams for common types of alterations and additions will be available on the Powercor website www.powercor.com.au prior to 1 January 2006.

Climate Saver

Climate Saver tariff and metering will remain available to residential customers in the Powercor area for both new and existing customers. Wiring diagrams to accommodate climate saver metering with interval meters are currently being prepared. It is anticipated the diagrams will be available on the Powercor website www.powercor.com.au prior to 1 January 2006.

Contact

Please call 13 22 06 for all enquiries related to metering, or any connection matter.

Meter Sealing

Electricity Distributors are required by the National Electricity Code, Metering Codes and other Codes to ensure seals are fitted to meters, covers or facilities of un-metered conductors and other metering equipment such as links and fuses, to reduce the potential for interference.

Recent site audits on new installations have identified a high percentage of metering equipment and meter panels, which have had seals either removed or interfered with. The Networks intends to increase surveillance on these installations and take the necessary action to ensure the equipment remains sealed at all times.

RECs are reminded:

- That service fuse/s operated under the conditions of the Code of Practice for Low Voltage Fuse Removal and Reinsertion must be refitted with numbered seals in accordance with that Code;
- If seals are to be removed for any purpose, including access to the rear of a metering panel, they should first contact the appropriate Responsible Officer by calling 13 22 06 for authorisation; and
- RECs are reminded that it is an offence to remove any seals, except under the above conditions and that action will be taken against any identified offender.

Tech Talk

Tech Talk is published on an 'as needs basis' with the aim of providing relevant information for Registered Electrical Contractors so they can provide industry best practice service to our customers.

All editions are available on the Powercor website www.powercor.com.au

Please advise Cath Adams on phone 03 9683 4276, facsimile 03 9683 4899 or e-mail cadams@powercor.com.au if:

- You are a Registered Electrical Contractor or associated industry participant and would like to join the Tech Talk mailing list;
- You have a change of address;
- You would like Tech Talk sent to your e-mail address.

*Seasons Greetings
from all at Powercor*
