



Michigan Customer Choice

Information for Customers of AEP

February 5, 2002

Competition brings new metering considerations

AEP traditionally has provided the meter(s) that records energy usage at your facility. AEP also has offered traditional meter services – such as pulse metering, meter circuit access, MeterMate™ and load profile reports and graphs – that you or your agent can use to obtain additional energy information.

AEP's Terms and Conditions of Service allow that new competitors may offer to provide certain metering services to you. At present, certain competitive services may be available to you only through your energy supplier. In time, however, you may be able to independently choose the supplier of competitive metering services.

This paper describes some of the metering options you may want to consider. It also describes the various hardware and software options you may need if you choose to work with a competitive meter service provider.

Interval metering

An interval meter measures and records usage in discrete time intervals throughout the month. Michigan electricity customers with maximum monthly billing demand of 200 kW or greater for the most recent 12 months and who choose to take service from an alternate energy supplier must be interval metered. You or your new alternate energy supplier, if you have chosen one, may request an interval meter if maximum monthly billing demand is less than 200 kW.

You are responsible for all costs associated with interval metering, including any charges to cover the incremental cost of operation and maintenance and meter data management. A one-time payment for the metering facilities will be made at the time of installation.

Interval metering may require a dedicated analog phone line at the meter location and you are responsible for associated installation and maintenance costs.

You can obtain an interval data file or load profile report from AEP for a fee. Please contact your AEP account representative for a list of

load profile offerings. Your AEP account representative can provide samples of available reports.

Please contact your AEP account representative for specific pricing information.

Pulse metering

Pulse metering is not used for billing purposes. Customers generally choose to install pulse metering for energy management purposes and to monitor energy use.

AEP can provide the following standard pulses:

- Standard KYZ pulse or kWh pulse,
- Reactive or KQh pulses and
- End of interval (EOI) pulses or time pulse.

The installation of pulse metering service may require that isolation relay(s) be installed under certain circumstances.

Please contact your AEP account representative for pulse metering technical specifications and pricing information.

AEP meter circuit access

AEP customers or their agents can access the secondary circuits of AEP's instrument transformers. This optional service:

- Makes possible the installation of a meter with features such as power

Pricing and technical requirements

Please contact your account representative for AEP installation charges, report charges and technical metering specifications.



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quality metering, real time metering, energy management, remote interrogation, etc.;

- Allows you to avoid the high cost of current and voltage transformer installation;
- Provides voltage and current information not available from pulse metering and
- Provides kilowatthour and demand data.

The secondary circuits consist of the output of the current transformers and voltage transformers. AEP will provide access to these circuits at the billing meter enclosure.

AEP can install either

- Approved customer provided auxiliary current sensors and/or fused leads from the potential (voltage) circuit or
- Wiring and connections to an approved customer owned meter.

Please contact your AEP account representative for pricing information.

Modem access for meter/load information

Customers or third parties with MV-90 or other software who wish to remotely interrogate AEP meter(s) can install an analog phone line to the meter(s), sign an agreement with AEP and obtain parameters that will allow the meter to be remotely interrogated.

Note: There are many third party providers that can offer a variety of energy and energy management services and equipment. AEP cannot recommend a provider or advise you on your choice of providers. AEP cannot recommend energy management systems or associated equipment.

MeterMate™

MeterMate™ enables customers to read their own meter and obtain interval data to produce their own reports and graphs. AEP will continue to read the meter for billing purposes.

MeterMate™ consists of two software packages

MeterMate™ is a registered trademark and product of GE. Windows™ and DOS™ are registered trademarks and products of the Microsoft Corporation.

- Read Only MeterMate™ (ROMM) and
- MeterMate™ Load Profile.

Customers considering MeterMate™ should plan on spending some time getting familiar with the software. Please note that ROMM is DOS™ based while MMLP is Windows™ based. Customers will also want to plan time monthly or as needed to download interval data.

Using ROMM, you may choose to interrogate (read) the meter at one or more of your facilities. AEP may remotely interrogate your meter monthly for billing purposes.

ROMM requires a dedicated analog phone line at the meter location and you are responsible for associated installation and maintenance costs.

ROMM enables customers to:

- Access the billing meter register information and
- View real time values of
 - Per phase voltage along with phase angle for each phase being measured,
 - Per phase current along with phase angle for each phase being measured,
 - Instantaneous kW demand,
 - Instantaneous kVAR demand and
 - Instantaneous power factor.

MeterMate Load Profile (MMLP) software enables customers to create

- Error log and not read reports;
- Customer load, group load and totalization load profiles;
- Customer, group and totalization coincident peaks;
- Customer, group and totalization summaries; and
- Customer and group status summaries.

MMLP also enables customers to create customer and totalization load profile graphs.

Please contact your AEP account representative for details on MeterMate™ customer requirements and pricing information.