



Lodi Electric Utility

Rules and Regulations No.17 MEASUREMENT OF SERVICE

Revision: 02

Summary of changes:

Revision	Date	Council Resolution	Summary of Changes	Comments
1	3/22/1989	89-29	-Initial Release	
2	9/4/2019	2019-182	-Revision Page added -Formatting changes -Made "Energy Data Pulses" only apply to legacy equipment	



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MEASUREMENT OF SERVICE

A. General

Meters and equipment necessary to measure the electrical energy supplied and sold by the City will be furnished, installed and maintained by the City in enclosures, panels, devices, etc., furnished by the Customer per City and "Electric Utility Service Equipment Requirements Committee" (EUSERC) requirements. Meters will be read and bills rendered on a monthly cycle.

B. Method of Measuring

The basic measuring unit for all Customer classes is the kilowatt-hour (kWh). This measure represents the electrical energy consumed by the Customer during a billing cycle. Depending on Customer class, additional measurements will be implemented, such as 'Demand' and 'Power Factor.' Demand metering measures the peak Demand (request for electrical energy, averaged) during a time interval, usually 15 minutes, but may be selected from 3 to 30 minutes depending on Load characteristics. This measurement is expressed as kilowatts (kW). Power Factor metering is accomplished by measuring the reactive component of the supplied energy during a billing cycle. This measurement is expressed as kilovoltampere-reactive-hours (kVARh). A trigonometric calculation using the kWh and kVARh, for the billing cycle, will yield the average Power Factor. Reference Chapter 13.20 Article III of the "Lodi Municipal Code" for further detail.

C. Accuracy limits

Electric revenue meters are tested periodically against a City standard based on Customer class. The City standard, in turn, is tested periodically (maximum interval 5 years) against a United States Government Agency standard. Residential meters are field tested and left in Service, if found to be within $\pm 2\%$ Average Percentage Registration. Commercial/Industrial meters are removed from Service and tested in the Meter Test Shop. Meters tested in the test shop are calibrated to within $\pm 0.2\%$ Average Percentage Registration prior to being returned to Service. The Average Percentage Registration is the sum of one light Load test (LL) and one heavy Load test (HL) divided by 2 as defined in "Code for Electricity Metering," Section 6.1.8.2 Method 2.



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D. Totalized Metering

Totalized metering is defined as the time-interval by time-interval (usually 15 minutes) summation of Demand and energy usage.

A Customer having more than one Service on the same Premise may have such Services totalized for billing purposes, provided the following conditions exist:

Each Service to be totalized must:

1. Be supplied by the same distribution feeder (under normal switching conditions).
2. Have a maximum Demand greater than or equal to 400 kW for three or more consecutive months.

For billing purposes, the "Customer Charge" for each Service will remain in effect as if no totalization did occur. Demand charges, energy charges, "Energy Power Cost Adjustment," and "Power Factor Adjustments" will be determined from the rate schedule appropriate to the totalized Demand reading.

Totalizing is not available for Services having co-generation and Services on the "SS" rate schedule.

Any Service being totalized will not be eligible for continuation of totalization in the event the monthly peak Demand falls below 400 kW for 12 or more consecutive months.

It will be the Customer's responsibility to provide Service Entrance Equipment capable of accepting the City's totalization equipment.

E. Energy Data Pulses

To assist the City's electric Customers in determining how a Customer might alter the electric energy use pattern so as to lower the Demand and/or energy usage, the City, upon written request, will provide energy data pulses to City electric utility Customers once it has been demonstrated to the City's satisfaction that the Customer has the capability of using such pulses for the purposes of Demand control or energy conservation. This section applies to legacy equipment only.

(End)