

MEA COMMERCIAL METER READING GUIDE

ACLARA kV2c METERS

TYPICALLY USED IN COMMERCIAL APPLICATION

METERING SECTION

TECHNICAL SERVICES DEPARTMENT

2021 EDITION

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MEA Meter Reading Guide – Aclara kV2c Commercial Meter

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MEA Meter Reading Guide – Aclara kV2c Commercial Meter

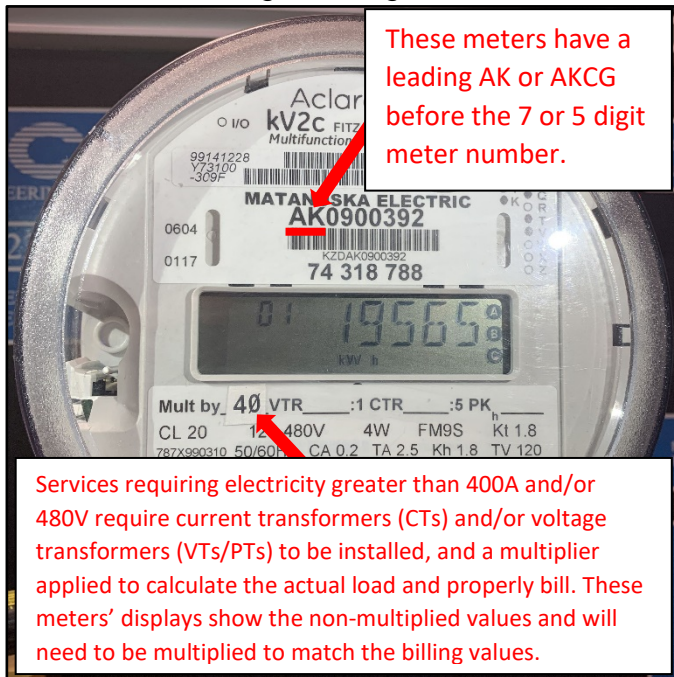
INTRODUCTION

Overview:

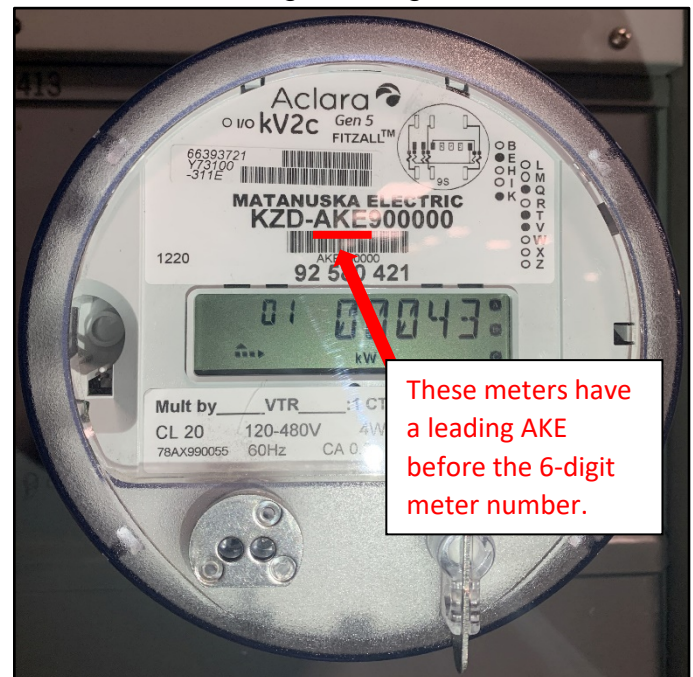
This guide was developed for our members to aid in the reading and understanding their meter display. Note that the meter screens are documented in the proper sequence, but the meter could be on any of the screens in the sequence when viewed. In a typical situation, Aclara I-210+ (residential) type meters are installed at residences and kV2c (commercial) type meters are installed at commercial sites, but there are exceptions where the application requires the opposite type of meter to be installed. Commercial meters may be single or three-phase based on their application.

GE was acquired by Aclara in 2015, so some meters may be branded as GE while others are Aclara. This document also covers special Verizon meters which have an “AC”, “ACE” or “AKC” before the 7-digit meter number. This document is available online at www.mea.coop, and is subject to change. If there are questions regarding this document, your meter or billing, please contact MEA Member Services at 907-761-9300.

kV2c with Old Programming



kV2c with New Programming



Change Management

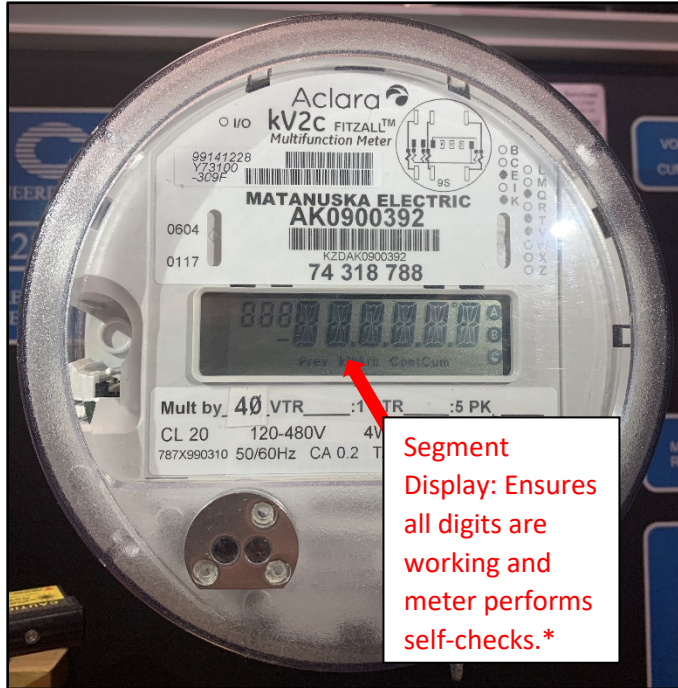
Any modifications to this document require written approval from the Manager of Substations & Metering.

Meter Type 1: ACLARA kV2c with Old Programming

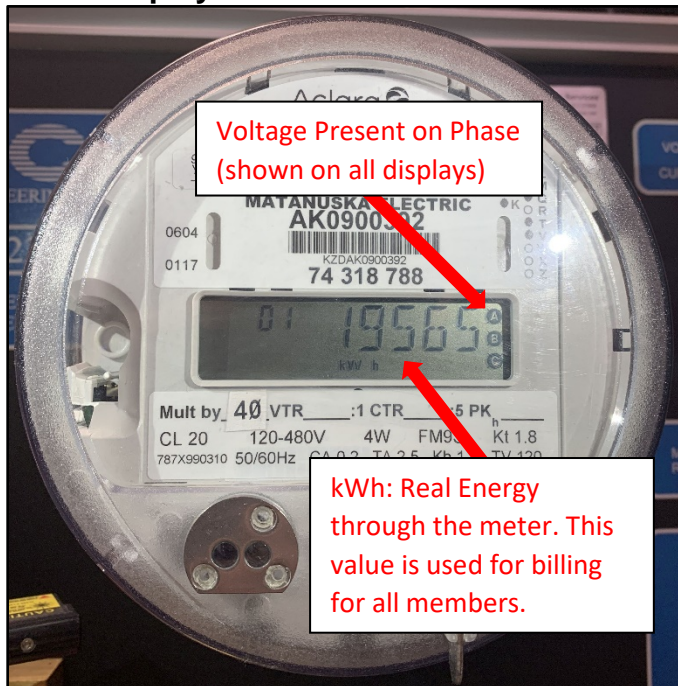
Application:

This type of meter has historically been installed for all typical commercial locations. MEA is no longer purchasing these meters and instead purchasing the kV2c meters with New Programming (described in the next section). These meters are like kV2c with regular displays. *Segment Display shows up periodically through the meter display cycle. If there are any error or information codes, they will accompany the segment display. See Appendix A for a list of error codes, their definition and recommended action.

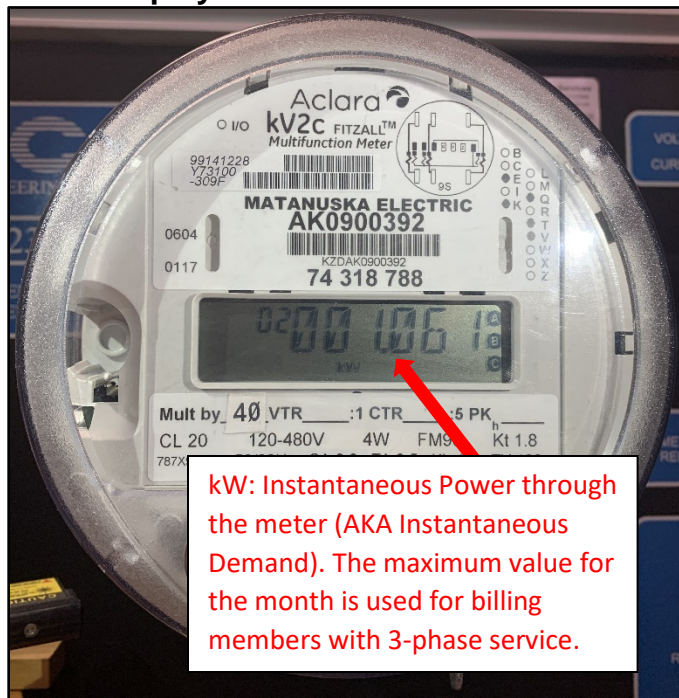
Meter Segment Display:



Meter Display #1:

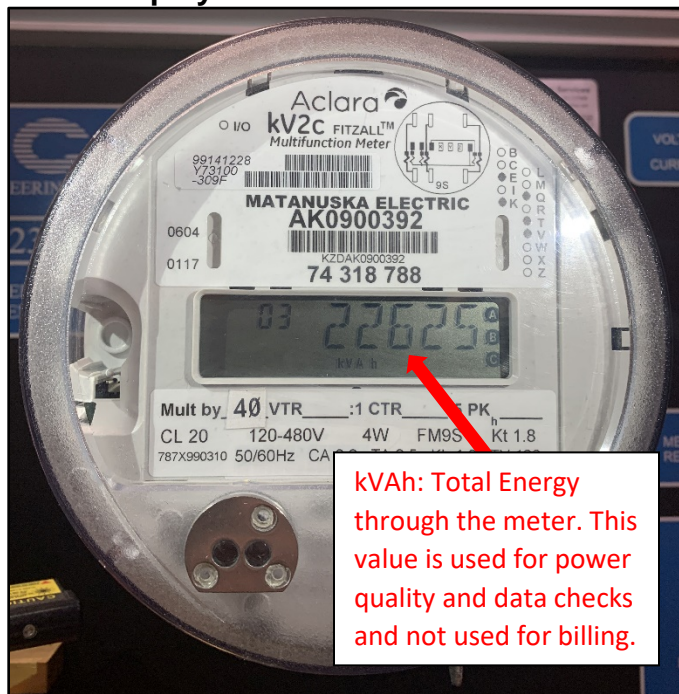


Meter Display #2:



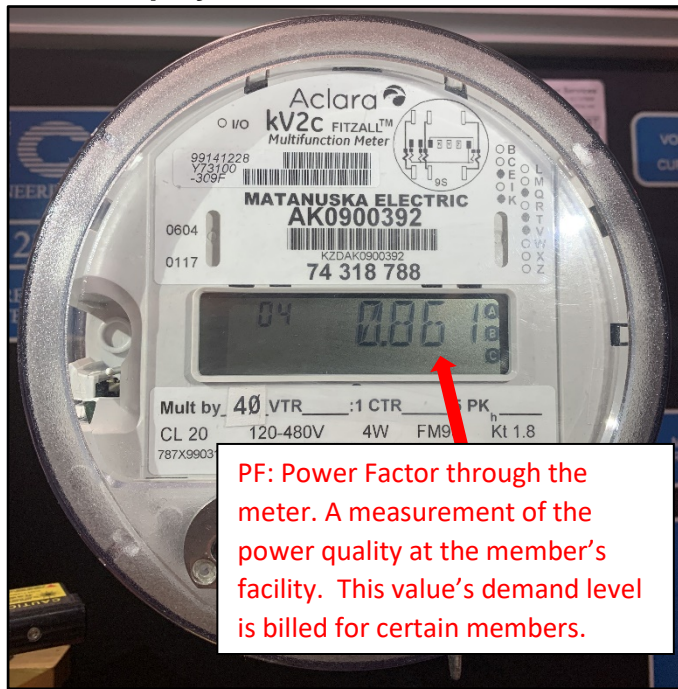
kW: Instantaneous Power through the meter (AKA Instantaneous Demand). The maximum value for the month is used for billing members with 3-phase service.

Meter Display #3:



kVAh: Total Energy through the meter. This value is used for power quality and data checks and not used for billing.

Meter Display #4:

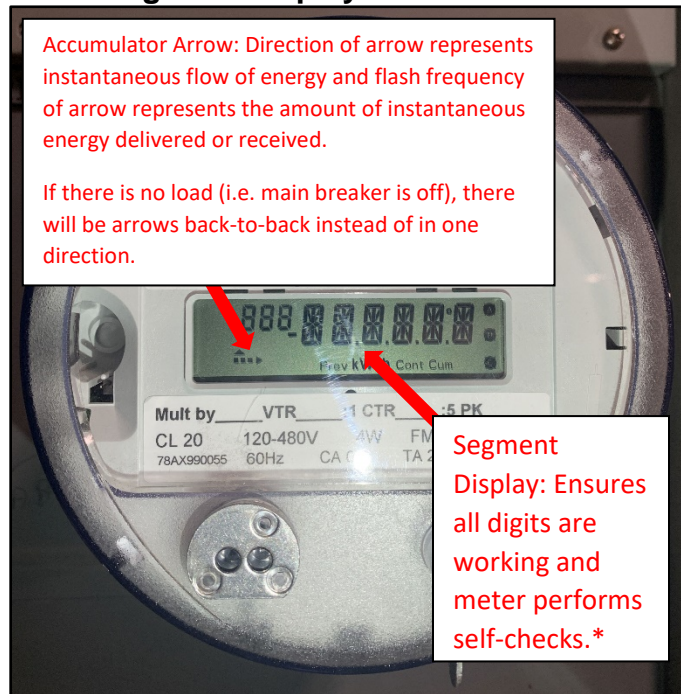


Meter Type 2: ACLARA kV2c with New Programming

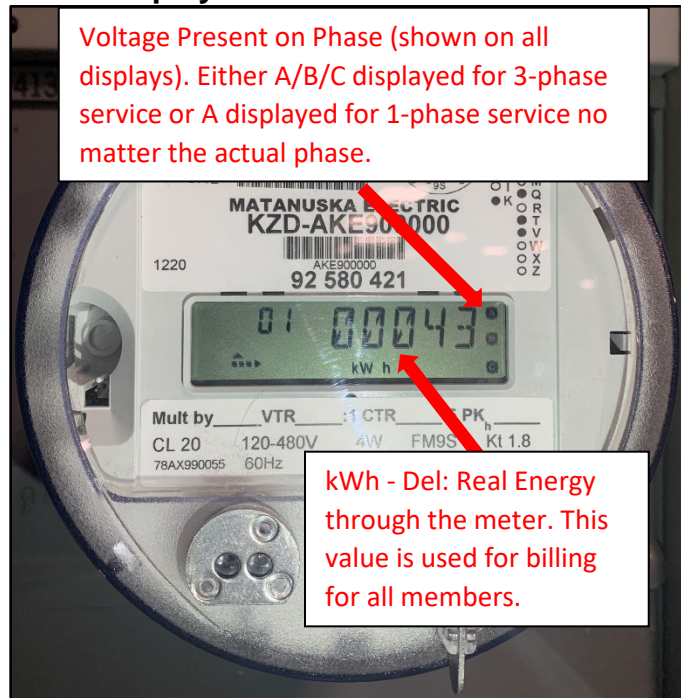
Application:

Starting in 2021, all new kV2c meters ordered by MEA will have new programming and the following displays. This is like the I-210+ meters with extended displays. Since MEA has an inventory of meters with the old programming that must be depleted, both types will be installed based on application needs until the meters with old programming have been depleted from inventory. *Segment Display shows up periodically through the meter display cycle. If there are any error or information codes, they will accompany the segment display. See Appendix A for a list of error codes, their definition and recommended action.

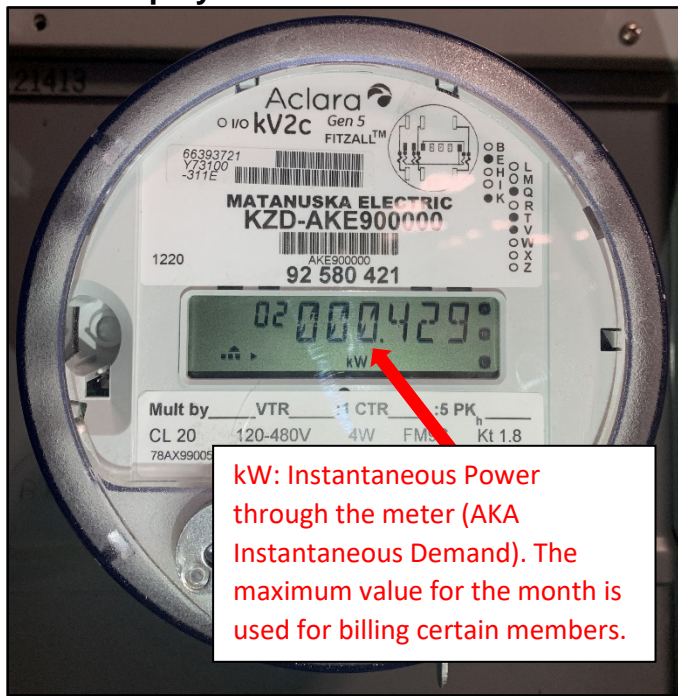
Meter Segment Display:



Meter Display #1:

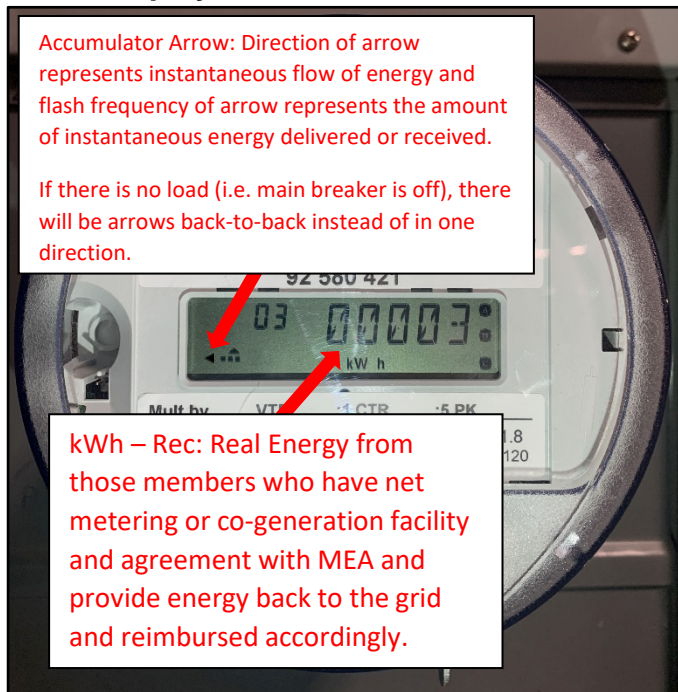


Meter Display #2:



kW: Instantaneous Power through the meter (AKA Instantaneous Demand). The maximum value for the month is used for billing certain members.

Meter Display #3:

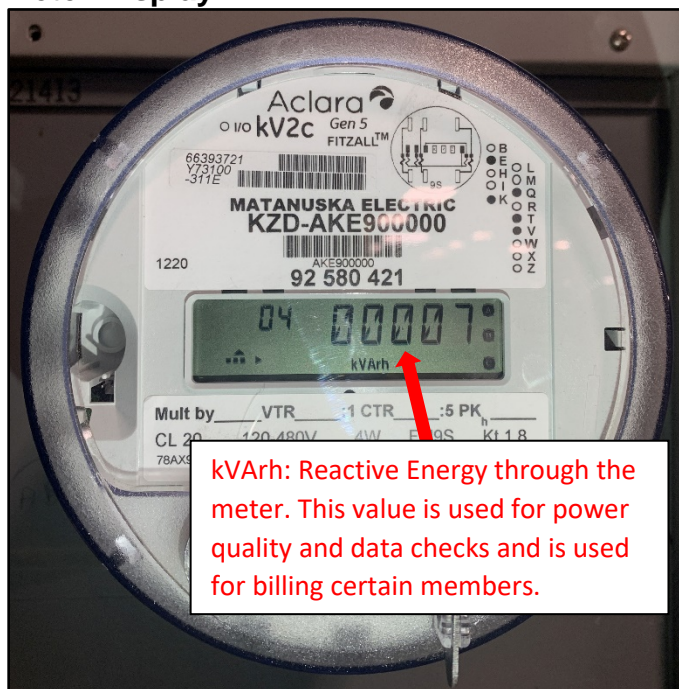


Accumulator Arrow: Direction of arrow represents instantaneous flow of energy and flash frequency of arrow represents the amount of instantaneous energy delivered or received.

If there is no load (i.e. main breaker is off), there will be arrows back-to-back instead of in one direction.

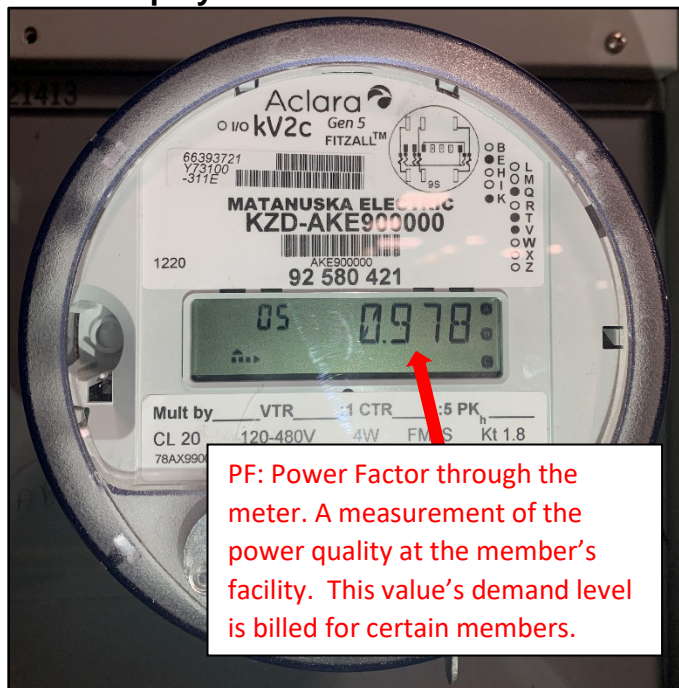
kWh – Rec: Real Energy from those members who have net metering or co-generation facility and agreement with MEA and provide energy back to the grid and reimbursed accordingly.

Meter Display #4:



kVarh: Reactive Energy through the meter. This value is used for power quality and data checks and is used for billing certain members.

Meter Display #5:



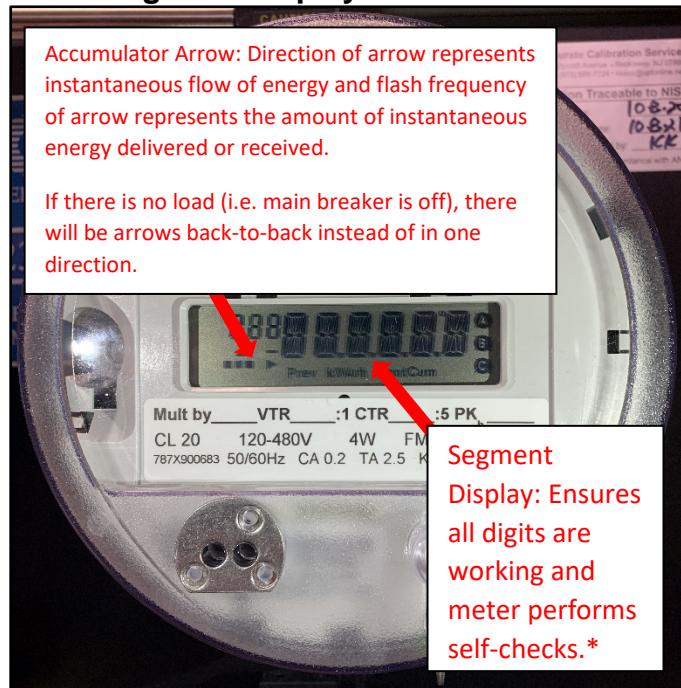
PF: Power Factor through the meter. A measurement of the power quality at the member's facility. This value's demand level is billed for certain members.

Meter Type 3: ACLARA kV2c with Verizon Modem and New Programming

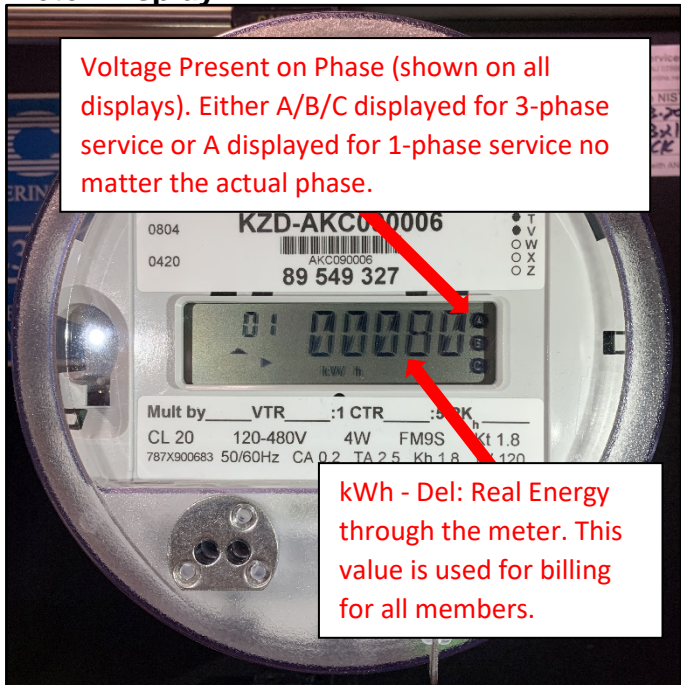
Application:

This type of meter is typically installed at locations with one the following conditions. 1. Power line carrier signal back to MEA with meter data is inconsistent/weak. 2. Power line carrier signal interference is determined to be present at the member premises, 3. More detailed energy data is required (for some larger electrical loads), 4. Installed at strategic locations for better outage detection. *Segment Display shows up periodically through the meter display cycle. If there are any error or information codes, they will accompany the segment display. See Appendix A for a list of error codes, their definition and recommended action.

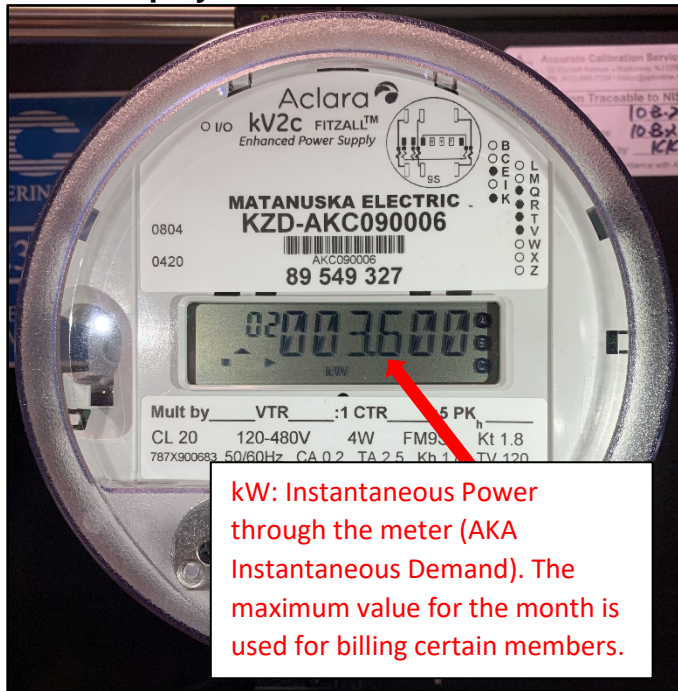
Meter Segment Display:



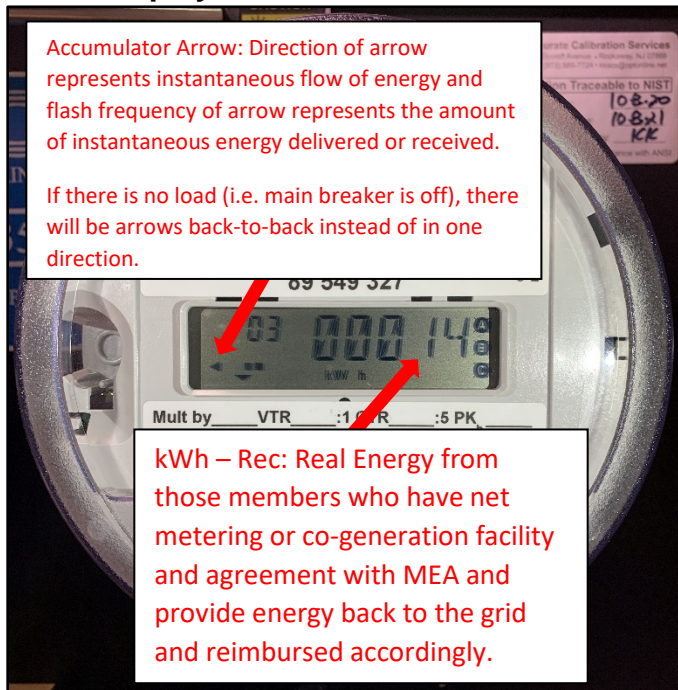
Meter Display #1:



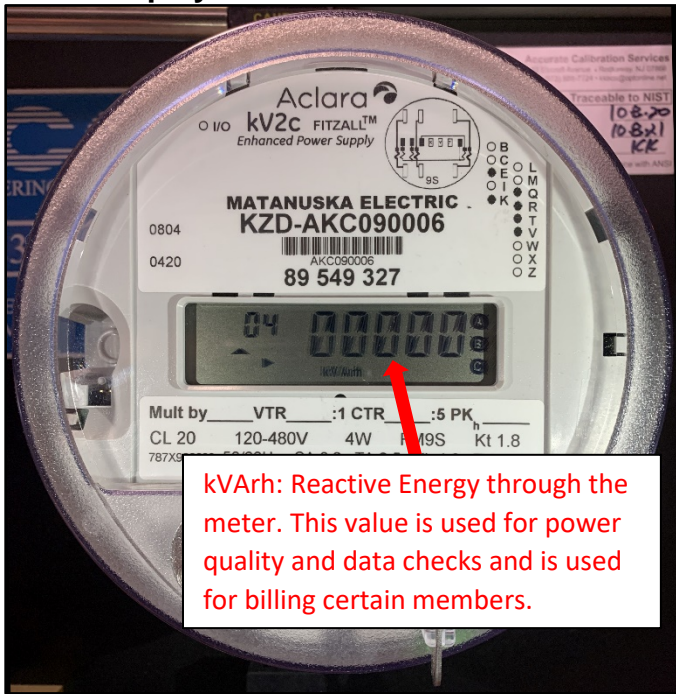
Meter Display #2:



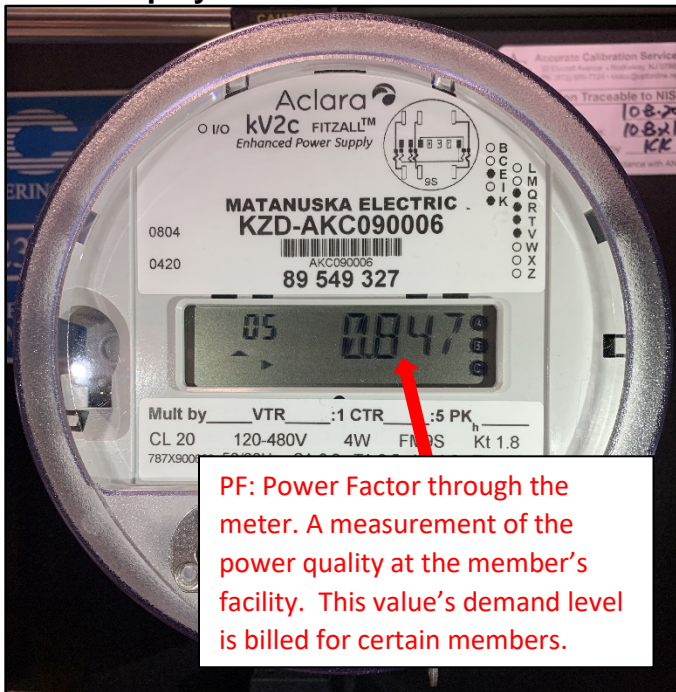
Meter Display #3:



Meter Display #4:



Meter Display #5:



APPENDIX A: kV2c Display Codes

Immediately contact MEA Member Services if any of the following displays are shown, or if another display is shown which isn't listed.

- CA 000 010: Indicates that the meter is unprogrammed and requires reprogramming.
- CA 000 040: Indicates that the meter's programming cannot be determined.

- Er 000 020: Indicates hardware failure.
- Er 000 100: Indicates RAM error.
- Er 000 200: Indicates EEPROM check sum failure.
- Er 000 300: Indicates RAM and EEPROM error.
- Er 001 000: Indicates either a microprocessor or ROM checksum error.
- Er 010 000: Indicates load profile parity or check sum error due to data memory failure.
- Er 100 000: Indicates A/D converter failed status test.
- Er 200 000: Indicates DSP configuration failed.
- Er 300 000: Indicates A/D converter and DSP failure.

MEA DISTRICT OFFICES



Matanuska Electric Association, Inc.
163 E. Industrial Way
Palmer, AK 99645
761-9300
www.mea.coop

Palmer Headquarters

163 E. Industrial Way
761-9300 or 745-3231

Wasilla

1401 S. Seward Meridian Pkwy.
376-7237 or 761-9500

Eagle River

11623 Aurora St.
694-2161

Engineering Office:

Big Lake (visits by appointment only)

9550 W. Herkimer Dr.
761-9450

Power Outages:

Mat-Su: 746-7697 (746-POWR)
Eagle River or Anchorage: 696-7697 (696-POWR)
SmartHub: Download the app at www.mea.coop

Underground Locate Requests:

Call Alaska Digline, Inc.
1-800-478-3121 (Mat-Su)
278-3121 (Eagle River or Anchorage)
Or dial 811

