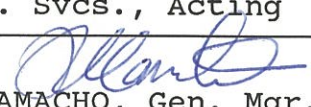


<b>G U A M   P O W E R   A U T H O R I T Y</b> <i>Standard Operating Procedure</i>	No. *SOP-080	Issued: 03/15/93
	Prepared By: ANNIE Q. SANTOS Manager, Cust. Svcs., Acting	
Title:   INSTALLATION OF Q-HOUR METER	Approved By:  RAYMOND C. CAMACHO, Gen. Mgr.	
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1.0   **PURPOSE**

This Standard Operating Procedure is published to facilitate and expedite accurate and reliable meter registration in the installation of the KQH meter in relation to the existing KWH meter.

2.0   **SCOPE**

This Standard Operating Procedure is applicable to the installation of KWH meter for all types of meters, voltages and phase sequence of line.

3.0   **REQUIREMENTS**

- 3.1   KQH meter shall be compatible to the corresponding KWH meter.
- 3.2   Appropriate testing devices or equipment shall be available i.e. voltmeter, phase sequence and phase angle tester, A.C. ammeter, megger, wattmeter, stop watch, voltage adapter and current transformer tester.
- 3.3   Correct markers for wirings and terminals of CTs, PTs, KWH and KQH meters shall be available.
- 3.4   Appropriate diagram for electrical wiring installation shall be available.
- 3.5   Customers shall be notified first before any work is started.
- 3.6   Dispatcher shall be notified about the schedule of work.

4.0   **PRELIMINARY CHECK**

- 4.1   Fill out Meter Installation/Investigation Report completely and accurately for both KWH and KQH meters.

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- 4.2 Temporarily jumper CT terminals before removing the power meter.
- 4.3 Remove meter and check phase sequence on existing KWH meter socket terminals, provide a correct phase numbering tag on each terminal.
- 4.4 Replace meter in its socket and make preparation for wire termination and reconnection. Consult schematic diagram when necessary.
- 4.5 Notify customer for short power interruption.
- 4.6 De-energize electrical system and start the interconnection of wires between KWH and KQH meter sockets.

## 5.0 **PROCEDURE FOR METER INTERCONNECTION**

- 5.1 Provide correct, clear markers for identification of wires.
- 5.2 Test continuity of each wire and check if short device on meter socket is working.

**CAUTION:** Current transformer terminals should never be opened at anytime. Place jumpers across CT terminals before removing and before installing power meters. Dangerous voltage may appear on current transformer terminals or meter jaws presenting safety hazards to human life and property. Never jumper terminals of potential transformers.

- 5.3 Identify meter sockets, CT, PT terminals and test switches, if used.
- 5.4 Test insulation resistance of each individual meter jaws and terminals of KQH.
- 5.5 Connect wires to meter terminals to conform with the schematic diagram applicable to electrical system. Meter sockets should be solidly grounded. No bare line wires should be left exposed.
- 5.6 Double check connection against the diagram.

- 5.7 Install KWH and KQH meters. Remove current transformer jumpers.
- 5.8 Double check all safety features of the installation.
- 5.9 Notify customer that power is to be restored.
- 5.10 Energize the electrical system.
- 5.11 Check if both KWH and KQH meters are working properly.
- 5.12 Analyze load following the standard procedure of load analysis. Make sure KQH rotates forward. KQH meter disk would not rotate or reverse due to detente.
- 5.13 If meter installation is found working properly, double check Meter Installation/Investigation Report to be sure all entries are accurately indicated.
- 5.14 Clear work area before leaving the place.
- 5.15 Notify customer that work has been done. Express appreciation to customers for their cooperation and apologize for the inconvenience.