

Filed Session of June 19, 1996
Case 95-E-0509
Approved as Recommended
and so Ordered
By the Commission

JOHN C. CRARY

Secretary

Issued & Effective July 16, 1996

STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

May 17, 1996

TO: THE COMMISSION

FROM: CONSUMER SERVICES DIVISION

SUBJECT: CASE 95-E-0509 - Petition of Long Island Lighting Company for Approval of the Schlumberger Industries Quantum Solid State Revenue Electricity Meter, filed in C 279.

SUMMARY OF
RECOMMENDATION:

It is recommended that the Commission approve the application of Long Island Lighting Company and thereby permit the use of the Schlumberger Industries Quantum Electronic Multifunction meter.

I. APPLICATION

By letter dated June 6, 1995, Long Island Lighting Company (LILCO) applied for approval of the Quantum Electronic Multifunction meter. This meter is manufactured by Schlumberger Industries (Schlumberger), 180 Technology Parkway, Norcross, Georgia 30092. The letter states that LILCO intends to utilize this meter for electric revenue metering applications at cogeneration interconnects and other specialized metering points i.e. large volume accounts, transmission and distribution substations.

II. GENERAL DESCRIPTION

The Quantum Electronic Multifunction meter is used for measuring polyphase energy and demand consumption at cogeneration interconnects, large volume accounts, and transmission and distribution substations. The Quantum meter is transformer rated, and depending on the application, can meter three-wire delta, four-wire delta, and four-wire wye services.

The Quantum Electronic Multifunction meter utilizes an advanced A/D sampling technique for all measurements, which allows for superior accuracy over the entire operating range of the meter. This measurement technique also provides for bi-directional power flow information, with quantities such as watts and vars available on a four quadrant basis.

The Quantum Electronic Multifunction meter allows for up to thirty-two (32) registers to be programmed using PC based software. Non volatile memory (EEPROM) is used to store programming and register information. Optional boards can be installed in the meter to perform additional functions: pulse outputs, load profile recording, and data communications. Several meter mountings are available: bottom connect, socket mount, switchboard/drawout, and rack mount. The cost of the Quantum Electronic Multifunction meter is approximately \$2,100.00. This amount can vary based on the host of options that are available at additional cost.

III. TESTS

Schlumberger and LILCO have tested the Quantum Electronic Multifunction meter in accordance with New York State Public Service Commission 16 NYCRR Part 93 (ANSI C12.1). Also, Public Service Commission staff witnessed LILCO performing several simulated field tests. These tests produced consistent and repeatable prescribed accuracies. Both Schlumberger and LILCO certify that all tests were conducted by personnel who have thorough practical and theoretical knowledge of the meters and adequate training in making precision measurements. The accuracy of the test equipment has been established by comparison with standards whose accuracy is traceable to the National Institute of Science and Technology.

IV. RECOMMENDATION

It is recommended that the Commission approve the application by LILCO and thereby permit the use of the Schlumberger Industries Quantum Electronic Multifunction meter in conjunction with revenue metering of

Case 95-E-0509

electric customers in New York State.

Respectfully Submitted,

FRANK ROESCH
Consumer Service Specialist IV

Reviewed By:

VILMA ELLEMBERG
Chief of Service & Compliance
Consumer Services Division

Approved:

A. EDWIN RODGER
Deputy Director
Consumer Services Division