Comments submitted by Richard Engelbrecht of RGE: 9/17/2004

(I started with Ho-Chen's edits. My idea was that information about the backup process would appear as bullets under the requirements for the primary billing metering. Example below. My additions in blue.)

2. Metering Equipment Standards and Specifications

The purpose of this section is to provide specifications for revenue metering system equipment. The specifications are intended to create an infrastructure for NYISO market billing that has the highest accuracy possible. The legacy-billing infrastructure used for the New York Power Pool that is still in place may continue to support the billing process, but may only meet the requirements of "backup" billing metering. Where this is the case, additional attention and monitoring will be required to maintain the accuracy of these installations until such time as a metering installation such as these specifications outline will be installed.

Each revenue metering system that supplies metering data to NYISO for energy settlement purpose shall meet the reliability and accuracy requirements outlined in this section. Components of such revenue metering systems shall comply with the standards detailed in appropriate sections of the industry standards or applicable standards/policies issued by Transmission Owners. These components should include transducers, meters, RTUs, instrument transformers, power supply and the data transmission sub-system. The installation, calibration and maintenance of the revenue metering equipment is detailed in Section 3 of this manual.

2.1 General Requirements

2.1.1 Reliability

Each revenue metering system shall be capable of supplying revenue metered data to NYISO on a timely and reliably manner.

• In the events that such data transmission is interrupted, the Metering Authority that is responsible shall provide back-up metering data to NYISO in a time frame that will not impact energy settlement. The Metering Authority shall restore the normal data transmission capability as promptly as possible.

2.1.2 Accuracy

Billing data values obtained from meters meeting this specification shall be transmitted to the ISO WebRec interface with zero error.

• If backup metering must be used, aggregated error associated with digital data transmission to NYISO from each backup metering system shall not exceed 0.1 percent. Analog data that must be used as backup to substitute for missing digital data should not exceed 1.0 percent of full scale analog reading.