

Background – Under the existing PJM tariff, PJM may approve non-utility meters/devices provided the data produced by such devices meets the +/- 2% accuracy standard. Some new utility meters do not have KYZ pulses but may be able to provide access to load data through a Home Area Network (HAN) connection. The device connected through the HAN ("HAN device") that is involved in the production and/or collection of load data may be a wireless pulse generator, a wireless pulse data recorder, or a wireless receiver that collects interval KwH readings.

PJM will approve the use of a HAN device to meet the DR interval meter data requirements based on the following:

HAN devices must be (1) qualified and approved by the utility for use at the site and (2) connected (paired) by the utility to the site utility meter or (3) paired via utility operated portal that is specifically for this purpose.

HAN at 1-minute interval readings:

- 1. For all Utility qualified and paired devices:
 - a. Tested and certified successfully as per the following **in the field** test procedure for a location.
 - i. CSP to record 7 contiguous days of minute data (10,080 minutes)
 - 1. The HAN must successfully receive and record at least 98% of the minutes (9,878 minutes) no greater than 102% (10,281 minutes)
 - 2. Must successfully achieve not more than an overall 2% error (accuracy) based upon EDC interval KWH comparison (based on finest EDC interval available but no greater than hourly interval).
 - 3. Timestamp on first and last (daily) pulse reading must match the clock reading 1) on a Stratum 2 NTP server that syncs directly with the NIST Stratum 1 NTP server pool OR 2) match the clock reading of the NIST Stratum 1 NTP server pool.
 - ii. For residential applications, the steps in i. above are applied to a random sample of locations based on a 90% confidence/10% error representative sample (see Manual 19 Attachment C: Residential Non-Interval Metered Guidelines). For any sample points/locations that fail the 2% error meter test, the CSP is required to investigate, report to PJM and take corrective actions as approved by PJM.
 - b. The steps outlined in a. above must be performed for each installation or sample.
 - Based on results PJM will either approve or deny the HAN device for the installation.