

Western Area Power Administration Upper Great Plains Region (UGPR)

UGPR Generation Metering Requirements

This regional business practice supplements the posted Western-wide document titled "Treatment of Behind the Meter Generation for Transmission System Network Service Customers", and documents additional Upper Great Plains Region (UGPR) specific metering requirements for generation located within the UGPR balancing areas:

- a) For multiple generating units at the same location where the units are considered a single resource, one revenue meter is acceptable as long as there is no load trapped behind the meter and as long as any sales of this generation are from the "Resource" and not from any individual unit. Multiple units at the same location not meeting the single resource requirement are considered as individual resources and require the units to be metered individually to facilitate energy imbalance, energy replacement (for loss of a unit) or schedule curtailment purposes.
- b) Continuous real time monitoring that is required to be transmitted to the UGPR control center shall include real time watts, vars, transmission system or bus voltage at the point of interconnection and unit breaker status as well as the hourly accumulated watts. If available, transmission system or bus frequency should also be provided. The equipment itself and communications necessary to transmit this data to the UGPR control center shall be installed and maintained at the customer's expense.
- c) Generation sites within the UGPR Eastern Interconnection (WAUE) balancing area greater than or equal to 30 MW (greater than or equal to 5 MW within the UGPR Western Interconnection (WAUW) balancing area) must have the ability to scan at a maximum rate of 4 seconds. 50% of the balancing area's L₁₀ was used as the rationale for this requirement:
 - (1) WAUE – $54.66 \text{ MW} / 2 = 27.33$ (rounded to 30 MW)
 - (2) WAUW – $7.78 \text{ MW} / 2 = 3.89$ (rounded to 5 MW)
- d) Generation sites within either the WAUE or WAUW balancing areas that have or will have the ability to provide Automatic Generation Control (AGC) must have a maximum scan rate of 4 seconds.
- e) At generation sites where UGPR has operational jurisdiction of the generation equipment (unit breakers, or collector breakers, for example), a maximum scan rate of 4 seconds is required.

- f) For generation sites where items (c), (d), or (e) do not apply, scan rates not exceeding one minute are sufficient.
- g) In addition to scan rates, data security and reliability will also be considered in deciding on final communication configurations. RTU-based traffic is considered the most reliable and secure option, based on UGPR's current architecture. However, for installations that do not require a maximum scan rate of 4 seconds, and that do not result in any control actions being sent to substation equipment, other communications methods can be considered.

Revised – July 12, 2007

WAPA-UGPR-Generation-Metering-Requirements.doc