

## **The Metering Needs for Self-Tracking Utilities Under RTO West.**

Most incumbent utilities that are already operating a NERC-certified control area would have little problem performing self-tracking under RTO West operations. I believe that self-tracking is simply a variant of operating a pseudo-control area (P-CA).

Self-tracking is a process whereby the P-CA operator provides its own regulation and load following ancillary services. Simply stated, the self-tracking entity maintains a near-continuous balancing of its loads and resources, thereby avoiding charges for those services from the RTO.

The key ingredients for self-tracking are the metering data from the generators, the metering data from the points of interconnection between the P-CA and RTO West, the schedules of the net transfers into/out of the P-CA, and an operating Area Control Center with AGC. The telemetering at the interconnections and for the generators to be included within the P-CA should already exist. As long as the pre-existing telemetering is maintained, and appropriate adjustments are made to the P-CA boundary telemetering whenever called for, then the control center should have the technical ability to provide tie-line control. In fact, the requirements for self-tracking will likely be less strenuous than for a control area operator, perhaps calling for a balancing period of 5 minutes or so.

New independent generators connecting to the RTO West grid will have to telemeter their signals to the RTO, so that they will not fall into a P-CA, regardless of geography.

Schedules of net transfers into/out of the P-CA would include imports from, or through, RTO West to serve loads within the P-CA, and exports to RTO West out of the P-CA from generators that are metered as part of the P-CA. The P-CA operator should have all of these schedules in order to perform self-tracking.

Complications arise in areas where retail access programs allow individual loads to be served by entities other than the incumbent utility. Such programs usually allow load metering which is insufficient for control area purposes, adding uncertainty into the self-tracking process. Additionally, the Merchant of the incumbent utility is usually precluded from having the individual retail access imports, for competitive reasons. It may be necessary for the RTO to supply the retail access schedules back to the utility in an aggregated and anonymous manner in order to facilitate self-tracking. In the initial stages of retail access, the errors may be small enough to allow the utility to make compensating estimates, but, eventually, additional metering may be required if self-tracking is to be continued. Retail access brings other challenges to RTO West in the settlements areas.

Metering between the RTO-controlled transmission lines and the Utility controlled distribution lines is not a requirement for self-tracking to be accomplished. However, accurately metering the T-D intersection may be required for other reasons, such as to deal with losses for both distribution and transmission, and to allow RTO West to follow good business practices.