

WESTERN ELECTRIC TIMELINES

NORTHWEST AND INTERCONNECTED* MARKETS

Currently, all Northwest electric markets are bilateral markets. Additional bilateral electric markets exist at delivery points interconnecting with California (COB / NOB) and other Southwestern markets.

Day Ahead Transactions

No set time, but trading is typically between 5:30 am and 9 am Pacific Time.

Energy is then prescheduled between 8 am and 2 pm in accordance with WECC designated preschedule day in order to meet the NERC tagging requirements.

Real-time Transactions

Real-time transactions are typically done any time after the preschedule deadline for that day. They must be completed by 20 minutes prior to the hour of delivery.

* Non-CAISO bilateral markets: California Oregon Border (COB), Nevada Oregon Border (NOB). Palo Verde, Mead, Four Corners, etc...

CALIFORNIA ISO

Right now the CAISO has day-ahead and hour-ahead ancillary services markets, and a real-time supplemental energy market. They plan to implement day-ahead and hour-ahead energy markets in early 2004 as part of Phase II of their Market Design 2002 project, to fill the gap left when the PX shut down.

The day-ahead ancillary services timeline is as follows:

The preferred market closes at 10 a.m. The CAISO does not accept bids after the market closes, but on occasion has held the market open a few extra minutes to accommodate bidders having technical difficulty or due to their own technical problems. They have implemented an operating procedure (M-434) to publish the identities of scheduling coordinators delaying the close of CAISO markets by submitting schedules that cannot be validated by the deadline.

CAISO intends to publish initial schedules by 11 a.m. This is usually roughly on time. If there is congestion (usually there is), the CAISO runs a revised preferred market for 60 minutes after the initial schedules are published.

After the revised preferred market closes, the CAISO attempts to publish final schedules by 1 p.m. There are often delays; in the worst cases final schedules may be an hour or more late.

The hour-ahead ancillary services timeline is a single "cycle:"

The market closes at 2 hours before the start of the delivery hour.

Final schedules are published 1 hour before the delivery hour.

Note: In their MD02 process, the CAISO has raised the question of changing the hour-ahead market timeline so that the hour-ahead market and the real-time market close simultaneously at 60 minutes before the start of the delivery hour, to allow schedule changes closer to real time. Some market participants oppose this change, because they want to decide their activity in the real-time market based on the results of the hour-ahead market.

The supplemental (real time) energy market closes 45 minutes before the start of the delivery hour.

The ISO notifies bidders of supplemental energy schedules shortly after the market closes.