PJM Interconnection provides a set of Internet-based software tools, formerly known as eTools, that enable PJM members to obtain continuous real-time energy data to manage their transactions and make business decisions.

Access to information is critical to the success of markets. For markets to function effectively, the participants need information and the ability to act on it quickly. For example, real-time price information allows PJM members to follow market changes and make rapid buy and sell decisions. If prices are rising, sellers can come into the market, while buyers may decide to shift their operations or buy power elsewhere.

The following summarizes PJM’s major online tools:

**ExSchedule** (formerly Enhanced Energy Scheduler) manages the exchange of bulk power between PJM and other control areas by enabling market participants to request, evaluate and confirm their external bilateral transactions. This tool can be used to submit real-time and day-ahead energy transactions crossing the external borders of PJM to the energy market.

**InSchedule** allows market participants to schedule bilateral energy transactions within PJM. It is used by power marketers, load-serving entities and generation owners to submit their internal PJM energy schedule data.

**eFTR** (Financial Transmission Rights) is used by members and other transmission customers to participate in scheduled FTR auctions, as well as post FTRs for bilateral trading. FTRs are financial contracts that entitle the holder to a stream of revenues or charges based on the hourly energy price differences across a transmission path in the Day-Ahead Market. The purpose of an FTR is to provide market participants with a hedging mechanism when delivering energy across the PJM system.

**eData** provides a customizable, real-time visual snapshot of operational and market data. Anyone can subscribe to eData to view real-time and day-ahead locational marginal prices, which are updated every five minutes, and a wide range of other data.

**eDataFeed** is a PJM Web service that provides time-sensitive pricing and load information from the eData database via an interface that allows subscribers to program automated requests for customized data. eDataFeed enables subscribers to select and “stream” selected PJM market and operating information directly to their systems.

**eDART** (Dispatcher Application and Reporting Tool) is used by transmission and generation owners to exchange operational and planning data with the PJM control center electronically. Transmission and generation owners submit outage and rating information, along with other operational data and status reports.

**eGADS** (Generator Availability Data System) allows generation owners to submit generator outage and performance data required by PJM and the North American Electric Reliability Corp. eGADS information is confidential among the generation owner, PJM and NERC.

**eMKT** allows PJM members to submit information and obtain data needed to conduct business in the Day-Ahead, Regulation and Synchronized Reserve markets. Load-serving entities submit demand and price-sensitive demand bids to the Day-Ahead Market, as well as manage their synchronized reserve and regulation obligations. Generator owners submit offers into the Day-
Ahead, Synchronized Reserve and Regulation markets.

**eLRS** allows PJM members to administer the registration, notification, meter data and settlement process for demand response resources in the PJM markets. Demand resource bids into the PJM wholesale market takes place directly in eMKT for energy and ancillary services and in eRPM for capacity.

**Power Meter** (formerly eMTR) calculates a market participant’s actual interchange energy amounts to be used for real-time energy market settlements. Transmission and generation owners use it to submit hourly tie and generator values to be verified and corrected on a next-hour basis.

**eRPM** enables market participants to submit resource-specific sell offers or buy bids into PJM’s Reliability Pricing Model capacity auctions. Participants also can view auction results and create capacity transactions via eRPM.

**OASIS** (Open Access Same-Time Information System) provides access to transmission services and transmission reservation information. Anyone can request “read-only” access to OASIS to monitor transmission system activity. However, only authorized members and transmission customers have the ability to reserve their network firm or nonfirm point-to-point transmission service through OASIS.

**MSRS** (Market Settlements Reporting System) is used by PJM market participants to retrieve market settlements reports and monthly PJM billing statements.

**eCredit** enables members to view their credit position, allocate credit between markets, request credit refunds and view credit reports.

**Voting** facilitates voting at Markets and Reliability Committee and Members Committee meetings. The application helps streamline quorum establishment, vote tallying and reporting. It allows both on-site and remote meeting attendees to cast votes for agenda items presented to the membership for voting.

**Emergency Procedures** provides information about important and/or emergency events as they occur. Examples include hot weather alerts, transmission loading relief procedures and minimum generation events.

Other tools include Data Miner, which provides a new method for requesting specific public data through the PJM website as well as a method for making system-to-system requests via Web Services; Gas Pipeline, which monitors and displays critical notifications about the gas pipelines that supply natural gas to generators contributing their capacity to PJM; and Resource Tracker, which provides generation owners with a single view of generator ownership information as recorded across various PJM applications.

A number of the online tools, including OASIS, ExSchedule, InSchedule, eMKT, eMTR, eData, eFTR, eRPM, eLRS, eCredit, Voting and MSRS, have been grouped together so that an authorized user can access these tools with a single user ID and password that the member company controls.

4/14/2014