

In this manual, Locational Marginal Price (LMP) is defined as the marginal price for energy at the location where the energy is delivered or received. For accounting purposes, LMP is expressed in dollars per megawatt-hour (\$/MWh). In performing this LMP calculation, the cost of serving an increment of load at each bus from each resource associated with an eligible energy offer is calculated as the sum of the following three components of Locational Marginal Price: System Energy Price, Congestion Price, and Loss Price. In this manual, unless otherwise specified, the terms “LMP” or “Locational Marginal Price” refer to the total LMP value including all three components. For information on the concept of Locational Marginal Prices, please refer to Section 2 of this manual.

## 1.1 PJM Responsibilities

In the Day-ahead Market, PJM determines the least-price means (minimizing production cost in terms of bid prices submitted) of satisfying the Demand bids, Decrement bids, operating reserves and other ancillary services requirements of the market buyers, including the reliability requirements of the PJM RTO. In addition to the Day-ahead Market scheduling process, PJM will also schedule resources to:

- Satisfy the reserve requirements of the PJM RTO by minimizing the cost to provide additional operating reserves above what was scheduled in the Day-ahead Market if required,
- Provide other ancillary services requirements of the market buyers,
- Satisfy all other reliability requirements of the PJM RTO. Specifically, PJM’s responsibilities to support scheduling activities for all PJM Members include:

Develop the Day-ahead Market financial schedules based upon participant-supplied bids, offers and bilateral transaction schedules using least-cost security constrained resource commitment and dispatch analysis.

Post the following information after the Day-ahead Market clears at 4:00 p.m.:

- Schedules for Next Day by participant (generation & demand),
- Transaction Schedules,
- Day-ahead LMPs, Day-ahead Congestion Prices, & Day-ahead Loss Prices
- Day-ahead Binding Transmission Constraints,
- Day-ahead Net Tie Schedules,
- Day-ahead Reactive 500 kV Interface Indicator Limits,
- PJM Load Forecast,
- Aggregate Demand Bids
- PJM Day-ahead Scheduling Reserve (Operating Reserve) Objective.

Perform scheduling for the PJM Forecasted load and reserves not covered by the Day-ahead demand bids, Self-Scheduled Resources or Bilateral Transactions, including scheduling generation to relieve expected transmission constraints

Perform analysis to clear the Regulation Market and Synchronized Reserve Markets simultaneously and post the Regulation Market Clearing Price (RMCP), Regulation Market Capability Clearing Price (RMCCP), Regulation Market Performance Clearing Price (RMPCP) and Synchronized Reserve Market Clearing Price (SRMCP) on an hourly basis no later than 30 minutes prior to the start of the operating hour.

Maintain data and information which is related to generation facilities in the PJM RTO, as may be necessary to conduct the scheduling and dispatch of the PJM Interchange Energy Market and PJM RTO

Post the updated forecast of PJM Load and of the location and duration of any expected transmission congestion between areas in the PJM RTO

Closed loop interfaces should be announced 5 days prior to the next FTR auction close through posting on [www.pjm.com](http://www.pjm.com) – OASIS System Information and notification to the MIC and OC. Exceptions to this include estimated short duration planned, emergency or maintenance outages, (e.g., <10 days) to set price, or to allow DR to set price if a transmission limitation exists as defined in the tariff and manuals. The posting will include the status quo plus post interface definition with network model map-able branch names in CSV or XLS format. PJM will post advisory notice if details are still being studied.

Revise schedule of resources to reflect updated projections of load, changing Bulk Electric System conditions, availability of and constraints of limited energy and other resources

## 1.2 PJM Market Participants Responsibilities

Only PJM Members are eligible to submit offers and purchase energy or related services in the Day-ahead Energy Market and in the Real-time Energy Market. PJM Members include Market Buyers and Market Sellers.

### 1.2.1 Market Buyers

There are two general types of Market Buyers:

- *Metered Market Buyer* – A Metered Market Buyer is a buyer that is purchasing energy from the PJM Interchange Energy Market for consumption by end-users inside the PJM RTO. A Metered Market Buyer may be further classified as a Generation Market Buyer. A Generation Market Buyer is a Metered Market Buyer that owns or has contractual rights to the output of generation resources that are capable of serving the Market Buyer's load in the PJM RTO or selling energy-related services in the PJM Interchange Energy Market or elsewhere. By definition, all Market Buyers become Market Sellers upon approval of their applications.