A. A brief overview of the MISO Day 2 Market is as follows:

1. Minnesota’s four investor-owned utilities (IOU’s: Xcel Energy, Otter Tail Power Company, Minnesota Power & Light Company and Alliant Energy) as well as its municipal and cooperative Generation and Transmission (G&T) providers are fully engaged in the Midwest Independent System Operator (MISO) Day 2, Day-Ahead Market run out MISO’s headquarters at Carmel, Indiana. The utilities are called Market Participants.

2. The market, which began operation on April 1, 2005, is an energy-only spot market. Under the market procedure, each Market Participant each day separately offers each of its generators each hour into tomorrow’s market (at the generator’s cost to start up, run and shut down) along with its request for bids to meet its hourly load forecast. The bids and offers must be submitted by 10:00 AM CST.

3. All the offers from all the Market Participants in the MISO Day 2 Market footprint are then stacked each hour in merit order (order of cost). A clearing price is established hourly at the price of the lowest marginal cost resource (plus losses) necessary to meet the hourly load consistent with reliability and deliverability constraints (security constrained dispatch with market clearing price based on marginal cost of last unit placed in service). The entire day-ahead market is cleared hourly, and ALL generators are paid the price of the market clearing price necessary to serve the market load for that hour and for that location regardless of the actual cost to run. Similarly, each Market Participant which serves load, called a Load-Serving Entity (LSE) must bid their hourly load into the market and must pay the market clearing price for that hour for receiving all of its energy needs to serve load from the market. Hourly market clearing prices, called Locational Market Prices (LMP’s) are set separately at each load point and at each generator location called Commercial Participant (CP) nodes.

4. Prior to 3:00 PM on the day bids are submitted, MISO notifies each Market Participant specifying which units it must run tomorrow. With few exceptions, each Market Participant must bid ALL of its load and ALL of its generation into
the Day 2 Market. Because of losses incurred by shipping power around the grid and because of security (deliverability) constraints, MISO posts the separate nodal LMP’s at approximately 1300 CP node locations around the grid. The LMP’s change every 5 minutes and are averaged hourly. As the following day unfolds, the Day 2 Market prices are replaced by the real-time prices, and utilities pay penalties based on the difference between their bids and offers and actual performance. To minimize penalty exposure, each Market Participant continuously monitors its planned performance compared to actual and promptly notifies MISO dispatchers of known changes. Market participants can play the Day 2 Market against the Real-Time Market via virtual (dummy) bids and offers.

5. The Real-Time Energy Market dispatch is also supported by a Reliability Assessment Commitment (RAC) process to ensure that sufficient generating capacity is on line for load and to meet real-time, security-constrained operating conditions.

6. Market participants can hedge against transmission congestion cost penalties by purchasing Financial Transmission Rights (FTR’s) in advance.

7. In addition to buying and selling in the Day 2 Market, Participants can execute bilateral trades with other participants and can hedge their future purchases at five MISO trading hubs (FIRST ENERGY, ILLINOIS, CINERGY, MICHIGAN, MINNESOTA).

8. Market Information can be viewed every 5 minutes along with pricing contour maps at www.midwestiso.org under markets.

B. MISO Accounting

1. MISO credits each generating market participant each hour with an amount equal to the market clearing price at each of its generating locations (the CP generation node LMPs) times the generator output at each location.

2. For an LSE participant, such as an IOU which also must serve its customer load, MISO charges an offsetting amount for the load cost each hour equal to the MWH of load times the market clearing price at the load location (the CP load node LMP).

3. Because of location differences, the CP load node LMP is typically different from the CP generation node LMP. The generating offer revenues and the load bid costs for the Day 2 Market are cleared and netted in the Day Ahead Asset Energy Account.

4. The net Day-Ahead cost is then billed to the market participant as one of the 32 MISO charge types.
5. As the Real-Time Market unfolds and to the extent that actual loads and generation differ from the corresponding bids and offers into the Day-2 Market, MISO records and nets the differences in the Real Time Asset Energy Account as one of the 32 MISO charge types.

6. Beyond this basic accounting and because all utility resources and loads must be offered and bid into the market, the corresponding Market Participant is also billed or credited via other of the 32 MISO charge types MISO accounting then becomes quite complicated as reflected in charge types such as Revenue Sufficiency Guarantees (RSG’s), Uplift Charges, FTR charges and Account 16 and 17 administrative charges, etc.

C. Utility Accounting

1. Since a utility cannot distinguish from hour to hour whether any of its generators is generating for the needs of its own retail customers or the needs of other Market Participants, each utility must create a supplemental accounting based on “what if” principles that allocates its lowest cost generation first to the needs of its retail customers.

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