

139 FERC ¶ 61,152  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Philip D. Moeller, John R. Norris,  
and Cheryl A. LaFleur.

Midwest Independent Transmission  
System Operator, Inc.

Docket No. ER10-2090-000

ORDER ON ANNUAL COST OF NEW ENTRY RECALCULATION FILING

(Issued May 24, 2012)

1. This order accepts the Midwest Independent Transmission System Operator, Inc. (MISO) August 2, 2010 filing to recalculate the Cost of New Entry (CONE) (August 2 Filing), to be effective June 1, 2011.

**I. Background**

2. In an order issued on October 20, 2008 (October 20 Order),<sup>1</sup> the Commission conditionally accepted MISO's proposal, among other things, to allow load serving entities (LSEs) with insufficient capacity to satisfy their resource adequacy requirements with planning resources acquired from market participants with excess planning resources. The provisions allow deficient LSEs to acquire sufficient capacity either through the bilateral markets or via a voluntary capacity auction. However, for those LSEs that continue to be deficient, MISO proposed to assess a financial settlement charge based upon the annual CONE—that is, the estimated annual capital, operating, and other costs that would be incurred to develop a capacity resource in MISO.

3. In the October 20 Order, the Commission accepted MISO's proposal to reassess and recalculate the CONE value on an annual basis.<sup>2</sup> However, the Commission did not accept MISO's estimated annual CONE value of \$80,000/MW.<sup>3</sup> Rather, the Commission

---

<sup>1</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 125 FERC ¶ 61,060 (2008) (October 20 Order).

<sup>2</sup> *Id.* PP 75-76.

<sup>3</sup> *Id.* P 74.

found that MISO had not provided adequate information for the Commission to determine the reasonableness of the proposed initial CONE figure. Therefore, the Commission required MISO to further justify the calculation of the initial CONE figure in a compliance filing and to provide additional information including a detailed description of the process for determining the CONE value, the input data, and the assumptions used to derive the CONE value.

4. On compliance, MISO provided additional justification for its CONE estimate of \$80,000/MW, including detailed information regarding its basis for the estimate. In particular, MISO noted that its CONE value was based on the Market Monitor's 2007 State of the Market Report, which reviewed the overnight capital costs with a five percent contingency factor and the fixed operating and maintenance costs for a conventional combustion turbine. The Market Monitor further made certain assumptions regarding the costs of the combustion turbine, including a 50/50 debt to equity ratio, 15-year depreciation, 20 year project life and loan term, 7 percent interest rate, 3 percent escalation factor, 2.5 percent GDP deflator, 43 percent combined federal and state tax rate, and 12 percent return on equity.

5. The Commission accepted the MISO estimated CONE value, as well as its monthly assessment proposal, on April 16, 2009, to be effective June 1, 2009.<sup>4</sup> In that order, the Commission found that MISO's estimated annual CONE value of \$80,000/MW was just and reasonable. The Commission further found that MISO's methodology and its assumptions were consistent with industry practice and were just and reasonable.<sup>5</sup> On rehearing of that determination, the Commission affirmed that the assumptions and methods used by MISO and the Market Monitor for developing the estimate of CONE value were reasonable.<sup>6</sup>

6. The Commission also accepted the annual update of the estimated CONE value filed by MISO on July 31, 2010, to be effective June 1, 2010.<sup>7</sup> The MISO June 1, 2010 update proposed to set the estimated annual CONE value at \$90,000 per MW, based on a revised capital cost estimate of \$638/kW and a revised operating and maintenance cost estimate of \$12.55/kW-year. The report contained detailed cost information for several

---

<sup>4</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 127 FERC ¶ 61,054, at PP 140-148 (2009) (April 16 Order).

<sup>5</sup> *Id.* PP 140-141.

<sup>6</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 137 FERC ¶ 61,213, at P 34 (2011) (December 15 Order).

<sup>7</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 135 FERC ¶ 61,082 (2011).

types of resources in the MISO region, including the costs associated with gas combustion turbine resources.

## **II. Notice of Compliance Filing and Responsive Pleadings**

7. Notice of the August 2 Filing was published in the *Federal Register*, 75 Fed. Reg. 49,923 (2010), with interventions and comments due on or before August 23, 2010. Timely motions to intervene were filed by MidAmerican Energy Company, American Municipal Power, Inc., Detroit Edison Company, Xcel Energy Services, Inc., Dynegy Power Marketing, Inc., Exelon Corporation, Consumers Energy Company, Wisconsin Electric Power Company and jointly by Illinois Municipal Electric Agency and the Coalition of Midwest Transmission Customers (collectively, Protestors). Duke Energy Corporation filed a late motion to intervene on August 26, 2010. Protestors filed a joint motion to consolidate and a joint protest to the MISO's filing. MISO filed an answer to the Protestors' motion to consolidate.

## **III. Discussion**

### **A. Procedural Matters**

8. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2011), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

9. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,<sup>8</sup> the Commission will grant Duke Energy Corporation's untimely, unopposed motion to intervene out of time given its interest in the proceeding, the early stage of this proceeding, and the absence of any undue prejudice or delay caused by the filing.

10. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure<sup>9</sup> prohibits an answer to a protest or an answer, unless otherwise ordered by the decisional authority. We will accept MISO's answer. This answer has provided information that assisted us in our decision-making process.

11. Protestors filed a motion to consolidate this proceeding with the proceeding addressing the annual CONE estimate update filed by MISO on July 31, 2010, for the period commencing June 1, 2010 in Docket No. ER08-394-023. Protestors assert that both proceedings involve the same factual record as the basis for determining whether the proposed CONE values are just and reasonable and the outcome of a Commission

---

<sup>8</sup> 18 C.F.R. § 385.214 (2011).

<sup>9</sup> 18 C.F.R. § 385.213(a)(2) (2011).

decision in this proceeding must be based on the outcome of Docket No. ER08-394-023. According to Protestors, in these circumstances, administrative efficiency and the avoidance of inconsistent results support consolidation of these proceedings.

12. MISO answers that it considers the basis for the Protestors' to be incorrect. MISO notes that the two proceedings are based upon different record evidence and factual data and that there is no record evidence to support the Protestors' assertion that the outcome of this proceeding must be based upon the outcome of the proceeding in Docket No. ER08-394-023. With regard to the latter point, MISO explains that the August 2 Filing does not rely on data in the Docket No. ER08-394-023 proceeding, but rather the August 2 Filing is based upon data developed by the Market Monitor in 2010 as well as data from the Energy Information Administration and other sources.

13. We deny the request for consolidation. The Commission has issued an order in Docket No. ER08-394-023,<sup>10</sup> and therefore the request for consolidation of this proceeding with Docket No. ER08-394-023 is moot.

## **B. Substantive Matters**

### **1. MISO Filing**

14. MISO proposes to set the estimated annual CONE value for the planning year that commences on June 1, 2011 and continues through May 31, 2012 at \$95,000 per MW.<sup>11</sup> The estimate is based on analysis undertaken by the Market Monitor and MISO. The Market Monitor estimated the annual cost of a new combustion turbine generation resource in the MISO to be approximately \$95,730 per MW.

15. MISO undertook an independent analysis in which it assumed capital costs for a new 160 MW combustion turbine<sup>12</sup> to be \$692 per kW and the fixed operating costs would be \$12.52 per kW-year. MISO states that these figures were based upon data

---

<sup>10</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 135 FERC ¶ 61,082 (2011).

<sup>11</sup> In its filing, MISO indicated that the filing was being made jointly with the Market Monitor, Potomac Economics. However, since the Market Monitor is not a jurisdictional entity and cannot submit a section 205 filing, this order treats the filing as though only MISO proposed changes to its tariff.

<sup>12</sup> MISO notes that combustion turbines have been used as the basis for determining the cost of new entry in other RTOs and ISOs. *See PJM Interconnection, L.L.C.* 126 FERC ¶ 61,275, at P 39 (2009); *New York Independent System Operator, Inc.*, 123 FERC ¶ 61,206, at P 24 (2008).

supplied by the Energy Information Administration in 2007 dollars, adjusted for inflation based on analysis undertaken by the Bureau of Economic Analysis.

16. MISO and the Market Monitor made certain assumptions regarding the costs of the combustion turbine, including a 50/50 debt to equity ratio, 20 year project life and loan term, 6.5 percent interest rate, 3 percent operation and maintenance escalation factor, 2.5 percent GDP deflator, 43 percent combined federal and state tax rate, and 12 percent return on equity. MISO notes that these factors and assumptions are comparable to those used by other RTOs.

17. MISO concurs with the Market Monitor analysis and concludes that the estimated annual cost of a new combustion turbine generation resource is approximately \$95,730 per MW.

18. MISO explains that while it could have adjusted the 2010 estimates to reflect legislative proposals to establish either a carbon tax or development of a carbon cost under a “cap and trade” approach, it elected not to do so since federal carbon legislation has not been enacted and the various proposals under discussion contain widely differing potential estimates for the cost of carbon.

19. MISO believes that establishing the CONE value at \$95,000 per MW<sup>13</sup> is reasonable, in part, because the market for capacity requires capacity costs to be recovered during a relatively short period, often during one month during the summer. In addition, MISO notes that, unlike other RTOs and ISOs, where the CONE value is charged to parties to represent the actual cost of capacity, in MISO the CONE value does not set prices but just establishes the penalty that will be charged for deficiencies.

## **2. Protest**

20. Protestors assert that MISO has provided insufficient evidence to support its proposed increase in the CONE value and has not met its burden of demonstrating that the proposed tariff revision is just and reasonable, as required under section 205 of the Federal Power Act.

21. Protestors contend that MISO has not provided information to indicate that the capital costs and operating and maintenance costs used to develop the CONE value estimate are based on the costs of a new peaking generator located in MISO. Protestors consider references by MISO to general assumptions and values developed by other

---

<sup>13</sup> For administrative convenience, MISO is proposing that the annual CONE calculation be rounded down from \$95,730 per MW to \$95,000 per MW.

RTOs to be insufficient as a basis for developing a CONE estimate.<sup>14</sup> Protestors also claim that the 2009 State of the Markets Report upon which MISO relies provides no information supporting the CONE value.

22. Protestors fault MISO for not providing the derivation of the capital cost of a combustion turbine and for not using the latest figures from the Energy Information Administration or using data for newer, more advanced generators. Protestors cite to a 2009 Energy Information Administration capital cost estimate of \$685 per kW for a conventional combustion turbine and an operating cost estimate of \$12.38 per kW-year.

23. Protestors argue that MISO needs to provide information that demonstrates that each of the assumptions used to develop the cost estimates are reasonable. Protestors also list questions related to each of the assumptions and they request that MISO rationalize the assumptions in light of current economic conditions and their impacts on financial markets.

24. With regard to MISO's statement that capacity costs must be recovered in a short time period, Protestors contend that MISO has not shown how the recovery period has any relation to the cost of building. Protestors assert that the statement by MISO that its CONE value does not set capacity prices has no bearing on whether the charge is just and reasonable.

25. In the event the Commission does not reject the MISO proposal, Protestors request that the matter be set for evidentiary hearing.

### **3. Commission Determination**

26. We will accept the proposed revised annual CONE value of \$95,000 per MW, to be effective June 1, 2011. We find the basis for the revised CONE value to be reasonable. The revised CONE value reflects a revised capital cost estimate (\$692 per kW versus \$638 per kW in the previous year estimate) and a minor adjustment to operating and maintenance costs (\$12.52 per kW-year versus \$12.55 per kW-year in the previous year estimate) based on analysis undertaken by the Market Monitor and MISO, and it is calculated based on the same methodology and all of the same assumptions that were used in its previous CONE estimates. In the April 16 Order, the Commission found that the methodology and the assumptions were consistent with industry practice and just and reasonable,<sup>15</sup> and the Commission affirmed this finding on rehearing of the April 16

---

<sup>14</sup> Protestors note that the Commission has rejected this type of generalized approach. See *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275, at P 52 (2009).

<sup>15</sup> April 16 Order, 127 FERC ¶ 61,054 at P 140.

Order determination.<sup>16</sup> Protestors have provided no basis to revisit that decision here. Nor have they provided us with a basis to question the justness and reasonableness of the MISO's methodology for estimating the CONE value. We continue to find the methodology and assumptions – including the updated capital and operating cost estimates -- to be just and reasonable.

27. We disagree with Protestors' claim that the proposed CONE value is not tied to the cost of entry in the MISO region. Both the Market Monitor and MISO indicate that their analyses estimated the cost of generation in the MISO region.<sup>17</sup> Nor do we find a reasonable basis to question the validity of the Market Monitor and MISO studies. While Protestors cite to other data that may be relevant to the analysis of a CONE value,<sup>18</sup> the fact that the Market Monitor and MISO used other assumptions for their studies does not make them unreasonable. We note that the capital and operating estimates cited by Protestors differ from the MISO and Market Monitor estimates by approximately one percent, a difference we consider to be *de minimis* and therefore these estimates do not provide the basis for a claim that the MISO and Market Monitor estimate is unreasonable. We also note that Protestors do not indicate if their estimates apply to generators in the MISO region.

28. Likewise, the fact that the Market Monitor and MISO based their analyses on conventional generation instead of advanced technology generation does not make their assumptions unreasonable. Conventional combustion turbines have been accepted as a reasonable basis for determining the cost of new entry in other ISOs and RTOs, and Protestors provide no arguments that such a basis is unreasonable. New entry by conventional generation into the MISO region is just as likely – if not more likely – than advanced technology generation, and therefore represents a reasonable basis for determining a CONE value estimate.

29. With regard to Protestors' concern with duplicative cost accounting in the three percent escalation factor and 2.5 percent GDP deflator assumptions, we do not find any basis for concern about duplication of costs. These assumptions, typical for project cost accounting, simply assume that operating costs increase at three percent per annum over the 20 year project life, and that all future costs are brought back into a current dollar value with a 2.5 percent per annum deflator.

---

<sup>16</sup> December 15 Order, 137 FERC ¶ 61,213 at P 34.

<sup>17</sup> August 2 Filing Transmittal Letter at 3 – 4.

<sup>18</sup> Protestors at 7.

30. We also do not agree with Protestors' claim that MISO has not provided sufficient support for its CONE estimate. As the Commission has emphasized, the purpose of the CONE estimate is to set a value for penalties in the event that an LSE is resource deficient and to determine the economic withholding threshold for auction bidding mitigation.<sup>19</sup> As discussed above, we find that MISO has provided sufficient evidence to support the CONE value and we find it to be just and reasonable. Accordingly, there is no need for further evidentiary proceedings and no need for further demonstration of each cost element, as the Commission has previously stated.<sup>20</sup>

31. With regard to Protestors' concern that MISO has not shown any relation between the recovery period and the cost of building, we understand this statement to be a reference to the monthly application of the CONE calculation in the monthly penalties. We accept MISO's proposed application of the CONE value estimate to a MW per month charge to be in compliance with the MISO tariff and Commission acceptance of a monthly deficiency penalty charge.<sup>21</sup>

The Commission orders:

MISO's proposed tariff provisions are hereby accepted for filing, to become effective June 1, 2011, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

---

<sup>19</sup> April 16 Order, 127 FERC ¶ 61,054 at P 45.

<sup>20</sup> December 15 Order, 137 FERC ¶ 61,213 at P 35.

<sup>21</sup> April 16 Order, 127 FERC ¶ 61,054 at P 144.