

**PREPARED DIRECT TESTIMONY OF MARK J. VOLPE
ON BEHALF OF THE MIDWEST INDEPENDENT TRANSMISSION
SYSTEM OPERATOR, INC.
DOCKET NO. ER04-____-000 BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Midwest Independent Transmission)
System Operator, Inc.)

Docket No. ER04-____-000

PREPARED DIRECT TESTIMONY OF
MARK J. VOLPE

I. INTRODUCTION

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Mark J. Volpe. My business address is 701 City Center Drive, Carmel,
3 Indiana, 46032.

4 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

5 A. Since March of 2000, I have been employed as the Director of Regulatory Affairs of the
6 Midwest Independent Transmission System Operator, Inc. ("Midwest ISO").

7 Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
8 BUSINESS EXPERIENCE.

9 A. I hold a Bachelor of Science degree in Business Administration, majoring in accounting
10 and legal studies, from Ohio Northern University (1981) and a Masters in Business
11 Administration from Ashland University (1988). My background includes several years
12 of experience in the development of unbundled transmission rates and ancillary service
13 schedule filings in conjunction with initial Open Access Transmission Tariff of the
14 Midwest ISO ("OATT"). I was involved in the negotiations that resulted in the formation
15 of the Midwest ISO representing initially, FirstEnergy during 1996, and then Cinergy

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1 Corp. from 1997 through the first quarter of 2000. I participated in the Pricing Working
2 Group and Transmission Owners Committee while the Midwest ISO was in the early
3 stages of development. I have over twenty years of energy and electric utility experience,
4 having held numerous positions in federal regulatory affairs, rates, strategic planning,
5 software quality assurance and financial information systems with Cinergy Services, Inc.,
6 FirstEnergy Corporation and Marathon Oil Company.

7 **Q. WHAT ARE YOUR JOB RESPONSIBILITIES AT THE MIDWEST ISO?**

8 A. As the Director of Regulatory Affairs for the Midwest ISO, my job responsibilities
9 include the continued development of the OATT and related tariff administration,
10 implementation and support of all regulatory filings with the Federal Energy Regulatory
11 Commission (“FERC” or “Commission”). My job responsibilities also include
12 coordination with the Midwest ISO’s Transmission Owners on various ratemaking issues
13 and the development of transmission policy, as well as, working on the resolution of
14 seams issues between the Midwest ISO and its bordering entities such as PJM
15 Interconnection, L.L.C. (“PJM”) and the Southwest Power Pool, Inc. (“SPP”). For the
16 past fifteen months, my responsibilities have focused on the resolution of stakeholder
17 issues in conjunction with the development of policy and procedures related to the
18 drafting of the necessary rates, terms and conditions as embodied in the proposed Open
19 Access Transmission and Energy Markets Tariff for the Midwest ISO (“Tariff”). The
20 Tariff will contain the terms and conditions necessary to accomplish the implementation
21 and subsequent operation of the Midwest ISO’s Day-Ahead and Real-Time Energy
22 Markets (collectively “Energy Markets”) and Financial Transmission Rights (“FTRs”).

1 **Q. HAVE YOU SPONSORED ANY OTHER TESTIMONY BEFORE**
2 **REGULATORY COMMISSIONS?**

3 A. Yes. I sponsored testimony of the Midwest ISO in FERC Docket No. ER01-780-000
4 concerning the Midwest ISO's Intervention and Protest of the withdrawal of Exelon
5 Corporation, Commonwealth Edison Company and Commonwealth Edison Company of
6 Indiana, Inc. (collectively "ComEd") from the Midwest ISO. I also sponsored testimony
7 in the Midwest ISO's Regional Transmission Organization ("RTO") Order No. 2000
8 supplemental compliance filing in FERC Docket No. RT01-87-000. After the Midwest
9 ISO was conditionally approved as an RTO, I sponsored testimony in the unbundling of
10 the Midwest ISO's Schedule 10 Administrative Cost Adder in FERC Docket No. ER02-
11 111-000. I sponsored testimony in Docket No. ER02-1420-000 to explain the nature of
12 the proposed Schedules 18 and 19 of the Resulting Company Open Access Transmission
13 Tariff given the Midwest ISO's filing of a single, consolidated Resulting Company Tariff
14 in conjunction with the proposed combination of the Midwest ISO and the SPP. Most
15 recently, I sponsored testimony in the initial Energy Markets tariff filing made on July
16 25, 2003 in Docket No. ER03-1118-000 on the tariff construct, changes to the existing
17 transmission service provisions to incorporate the markets and the stakeholder process.

18 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

19 A. The purpose of my testimony is to explain the overall approach for the tariff architecture
20 undertaken by the Midwest ISO in filing its Tariff on March 31, 2004. My testimony will
21 also discuss: 1) noteworthy revisions to common Tariff provisions and Transmission
22 Service portions of the Tariff; 2) the process leading to development of the Energy
23 Markets rates, terms and provisions; 3) the inter-relationship between the Tariff, Market

1 Protocols, and Business Practices Manuals; 4) Schedules 16 and 17, and 5) the resolution
2 of miscellaneous market design issues requiring further clarification or detail.

3 **Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY IN THIS**
4 **PROCEEDING.**

5 A. In brief, my testimony focuses on the overall design and construct of the Tariff. It
6 describes the evolution of the proposed Tariff from the Market Rules, which eventually
7 became the Market Protocols document, and which served as the basis for incorporating
8 the rates, terms and conditions required to effectuate the Energy Markets under a new
9 Tariff while retaining a level of continuity with the currently effective OATT. The
10 proposed Tariff has a revised architecture that includes the addition of discrete
11 “modules.” My testimony also includes a high-level overview of each of these modules.
12 The next area of my testimony revisits the stakeholder process and Midwest ISO’s
13 interaction with our stakeholders to address areas of market design that were identified as
14 “gaps,” as well as other areas of the Tariff needing further detail and clarification in the
15 context of Midwest ISO’s initial Tariff filing made on July 25, 2004. My testimony
16 closes with a description of how the Midwest ISO addressed other miscellaneous issues
17 and details requiring further clarification.

18 **II. TARIFF CONSTRUCT**

19 **Q. WHAT WAS THE OVERALL APPROACH TAKEN BY THE MIDWEST ISO IN**
20 **DEVELOPING THE TARIFF?**

21 A. Initially, the Midwest ISO developed a draft of the Tariff based on the original Market
22 Rules it filed on December 17, 2002, coupled with further guidance provided by the

1 Commission in Docket No. EL03-35-000,¹ as well as input provided by its stakeholders.
2 In developing the draft Tariff language, the Midwest ISO recognized that it needed a
3 working document through which it could discuss and work out market concepts.
4 Accordingly, the Midwest ISO developed a set of Market Protocols to reflect consensus
5 reached with its stakeholders and its own independent assessment of the necessary
6 Market Rules. The Midwest ISO then incorporated the principles reflected in the Market
7 Protocols into the Tariff, which was first filed on July 25, 2003.²

8 Following the withdrawal of the Tariff four months later, the Midwest ISO has
9 maintained the basic underlying format and fundamental content of the OATT and has
10 maintained the same basic structure of the Tariff as filed with the Commission on July
11 25, 2003. The Midwest ISO had an overarching goal of incorporating the Market Rules
12 into the present tariff structure without conducting a total redesign of the existing terms,
13 conditions or OATT that our stakeholders have become familiar with over the last two
14 years while the Midwest ISO has been acting as the single provider of Transmission
15 Service for customers within the Midwest ISO Region.

16 In designing the Tariff, the Midwest ISO chose to introduce a higher, overarching
17 concept to the existing OATT through the inclusion of “modules” that divide the existing
18 Transmission Service provisions, the new Energy Markets provisions, and other pertinent
19 aspects of the proposed market into separate chapters based upon subject matter and
20 applicability. This Tariff design allows users of the Tariff the ability to focus on those

¹ *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,196 (“Declaratory Order”), *on reh’g*, 103 FERC ¶ 61,120 (2003).

² *Midwest Indep. Transmission Sys. Operator, Inc.*, Third Revised, First Volume of the OATT and Tariff, Docket No. ER03-1118-000, July 25, 2003 (“July 25 Filing”).

1 specific provisions they deem applicable, without having to search through the entire
2 document.

3 This modular approach also provides the flexibility necessary to incorporate both
4 Transmission Service and Energy Markets provisions into the Tariff. In the future, other
5 modules can potentially be developed to include competitive markets for Ancillary
6 Services, such as a Regulation market and Operating Reserves or a Capacity market.

7 **Q. PLEASE DESCRIBE GENERALLY THE TARIFF MODULES.**

8 A. There are currently five modules in the Tariff, which are further described as follows:

9 Module A of the Tariff contains the common Tariff provisions and includes all
10 defined terms used throughout the Tariff. Module A also includes the original FERC
11 Order No. 888³ *pro forma* topic headings, such as Ancillary Services, Open Access
12 Same-Time Information System (“OASIS”), Reciprocity and an Expedited Dispute
13 Resolution process to address the new Tariff provisions concerning the treatment of
14 Grandfathered Agreements.

15 Module B contains the terms and conditions for Transmission Service. Module B
16 retains the provisions of the currently effective OATT with respect to the Midwest ISO’s
17 provision of Transmission Service. Part II of Module B includes the terms and
18 conditions for the provision of Point-To-Point Transmission Service, and Part III of

³ *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. [Regs. Preambles 1991-1996] ¶ 31,036 (1996), *on reh’g*, Order No. 888-A, FERC Stats. & Regs. [Regs. Preambles 1996-2000] ¶ 31,048 (1997), *on reh’g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *on reh’g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff’d in part and remanded in part, sub nom., Transmission Access Policy Study Group, et al., v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff’d, New York v. FERC*, 535 U.S. 1 (2002).

1 Module B includes the terms and conditions for Network Integration Transmission
2 Service. Part IV of Module B includes provisions from the current OATT for the
3 application of the Tariff to all Load within the Midwest ISO Region.

4 Module C contains the terms and conditions that apply to the Energy Markets and
5 FTRs. Part II of Module C includes the general provisions pertaining to the Energy
6 Markets, scheduling and congestion management. Part III of Module C includes the
7 terms and provisions required for the Day-Ahead and Real-Time Energy Markets. Part
8 IV of Module C includes the terms and conditions associated with FTRs.

9 The design and operation of the Midwest ISO's Energy Markets, per Module C of
10 the Tariff, is discussed in further detail in the direct testimony of Dr. Ronald McNamara,
11 Exhibit No. ____ (MISO-4) ("McNamara Testimony"). The Midwest ISO sees the
12 addition of Module C as the key step in the transition from operating solely as a
13 Transmission Provider under the OATT to now include the role of a market operator
14 under the proposed Tariff.

15 Module D includes revised Market Power Mitigation Measures based on those
16 filed by the Midwest ISO in Docket No. ER03-323-000, and reflects Commission
17 directives in the related order promulgated on October 29, 2003.⁴ Part II of Module D
18 contains the Independent Market Monitoring Plan, and Part III of this module contains
19 the specific Market Mitigation Measures.

20 Module E contains the Midwest ISO's interim mechanism for insuring resource
21 adequacy. As described in the McNamara Testimony, the Midwest ISO is filing an
22 interim resource adequacy approach and is continuing work with the Organization of

⁴ *Midwest Indep. Transmission Sys. Operator, Inc.*, 105 FERC ¶ 61,145 ("Guidance Order"), *reh'g denied*, 105 FERC ¶ 61,272 (2003).

1 MISO States (“OMS”) and the Supply Adequacy Work Group (“SAWG”) to address
2 State Regulatory Commission requirements with regard to implementing a long-term
3 solution to address resource adequacy and in compliance with the Commission’s
4 directives in the Declaratory Order.⁵ The timeline, developed by the OMS and the
5 SAWG, for implementing a long-term solution, is included as a separate set of
6 attachments to the transmittal letter accompanying this filing.

7 The remaining portions of the Tariff beyond Module E include the service
8 schedules and Attachments that reside in the currently effective OATT. These two areas
9 of the Tariff remain largely intact and are filed consistent with the provisions currently
10 found in the OATT, except for Schedules 4, 16 and 17, and Attachments K, J, M, S and
11 S-2, which have been revised in accordance with the addition of Module C and revisions
12 to Module B to the Tariff. Schedules 7, 8, 9 and 10 have been revised to delete
13 provisions related to TRANSLINK Development Company LLC, which was a proposed
14 independent transmission company that is no longer under active development. A new
15 Attachment W, depicting a form of the Market Participant Agreement, and a new
16 Attachment L, detailing the Midwest ISO’s Credit Policy, have also been added.
17 Attachment Y and Y-1 are new additions to the Tariff concerning System Support
18 Resources. Attachment Z includes a Non-Disclosure Agreement. The changes to many
19 of these service schedules and Attachments will be elaborated on later in my testimony
20 during my discussion of Modules B through E.

21 **Q. WERE SUBSTANTIVE REVISIONS MADE TO THE COMMON TARIFF**
22 **PROVISIONS IN MODULE A OF THE TARIFF?**

⁵ 102 FERC ¶ 61,196.

1 A. Yes. Three sets of substantive revisions were made to Module A of the Tariff. The first
2 set of substantive revisions to Module A involve the new set of Definitions, which will
3 now include additional defined terms required for the implementation of the Energy
4 Markets. The existing definitions in the current OATT, including the separate sets of
5 definitions found in several of the Attachments, were brought forward into a single set of
6 definitions for use throughout the Tariff. These definitions were further revised in order
7 to provide clarity and consistency among all of the defined terms in the Tariff. Many of
8 the changes to the definitions, including those that are required to implement the Energy
9 Markets were developed through an iterative process with the Midwest ISO's
10 stakeholders.

11 The second set of substantive revisions in Module A that merit further discussion
12 occur in Section 7 regarding the Billing and Payment provisions, which have been
13 revised to include separate provisions for Billing and Payment for Transmission
14 Customers as found in Sections 7.1 through 7.4. These sections of Module A relate only
15 to Transmission Service as provided under Module B. In addition, Section 7.1 has been
16 modified to make reference to the separate billing and payment provisions that will
17 continue to apply to Transmission Customers upon implementation of the Energy
18 Markets.

19 Additional provisions in Sections 7.5 through 7.15 of Module A have been
20 inserted to address the separate and distinct billing and payment practices applicable to
21 Market Participants for services provided under Module C of the Tariff. As discussed by
22 Mr. Michael Holstein in his testimony (Exhibit No. ___ (MISO-10)) the new credit
23 requirements and timing provisions are the product of the Credit Practices Working

1 Group and reflect the continued involvement of stakeholders in the development of credit
2 policy.

3 Section 12A is the third noteworthy area of Module A. It includes an Expedited
4 Dispute Resolution process pertaining solely to the treatment of Grandfathered
5 Agreements under the proposed Energy Markets. In the event that the parties to these
6 agreements are unable to agree as to who will bear responsibility for the scheduling
7 requirements of these contracts, and also who will bear financial responsibility for these
8 contracts under the Energy Markets, these provisions allow ample opportunity for these
9 contracts to be evaluated with respect to the nomination and allocation of Financial
10 Transmission Rights. Section 12A has a proposed effective date of June 7, 2004 in order
11 to allow the process to reach a conclusion within 30 days.

12 **Q. ARE THERE ANY OTHER NOTEWORTHY REVISIONS TO THE COMMON**
13 **TARIFF PROVISIONS IN MODULE A?**

14 A. In Section 3 of Module A, which addresses Ancillary Services, all references to Energy
15 Imbalance Service under Schedule 4 have been deleted due to the addition of the
16 Real-Time Energy Market in the Tariff. Schedule 4 has been removed because access to
17 a real-time balancing market is now provided through the Real-Time Energy Market as
18 described in Module C. Module A, Sections 12B through 12D now incorporate common
19 tariff provisions of the current OATT found in Sections 39 through 41, as these
20 provisions are common provisions that have applicability throughout the Tariff.

21 In addition to the previously mentioned revisions to Module A, other
22 non-substantive revisions have been made, including the capitalization of defined terms

1 and the insertion of references to other portions of the Tariff to add clarity and
2 consistency to the terms.

3 **Q. WERE SUBSTANTIVE REVISIONS MADE TO THE TRANSMISSION**
4 **SERVICE PROVISIONS IN MODULE B OF THE TARIFF?**

5 A. The only substantive revisions to Module B relate to the referencing of Attachment M for
6 Losses and Attachment K for Congestion Management in the currently effective OATT.
7 With the implementation of the Tariff, congestion and system losses will be settled
8 financially. Therefore, Attachment K – Congestion Management will be replaced by the
9 LMP based congestion management provisions of Module C. Similarly, the System
10 losses provisions found in the current Attachment M to the OATT, will now be settled
11 financially. The former references to Attachments K and M of the OATT will reference
12 Module C, Sections 39.3.1, 39.3.3, 40.3 and 40.4 in order to settle any real-time energy,
13 congestion costs and system losses.

14 All Transmission Service currently provided under the OATT and all new
15 Transmission Service in the future will utilize the two previously mentioned calculations
16 in Module C for the financial settlement of Marginal Losses, and for settlement of
17 congestion costs using the proposed Transmission Usage Charges and related provisions.
18 As such, all references to transmission losses and congestion management in the current
19 OATT refer to the previously mentioned sections in Module C where appropriate.

20 **Q. ARE NETWORK CUSTOMERS STILL OBLIGATED TO PROVIDE**
21 **REDISPATCH UNDER SECTION 30.5 OF THE CURRENT MIDWEST ISO**
22 **OATT?**

1 A. No. Under Module C of the proposed Tariff, Market Participants owning Generation
2 Resources and those Loads capable of providing demand response will provide bid-based
3 Offers in order for the Midwest ISO to conduct a market-based redispatch of these
4 Resources. The provisions of Section 30.5 of the OATT have been deleted to remove the
5 redispatch obligation for Network Customers. This deleted language dates back to the
6 *pro forma* OATT and is now obsolete as this obligation on Network Customers no longer
7 exists, as the Market Participants owning and/or controlling Generation Resources will
8 voluntarily provide market-based bids and react to price signals as the means of
9 managing congestion.

10 **Q. ARE THERE ANY MINISTERIAL CHANGES TO MODULE B**
11 **INCORPORATING THE ENERGY MARKET PROVISIONS?**

12 A. Yes. There are a number of relatively minor changes to what were originally undefined
13 terms (*e.g.* Energy and Capacity) in the OATT because these are now defined terms
14 under Module C of the Tariff. The Midwest ISO has sought to preserve, to the greatest
15 extent possible, the currently effective terms and conditions of the OATT Parts II and III,
16 including the preservation of all section headings and numbers. This allows for
17 consistency between Module B of the Tariff and the Midwest ISO's current Business
18 Practices Manual to the extent that these practices relate to the provision of Transmission
19 Service.

20 **Q. ARE THERE ANY REQUIRED REVISIONS TO THE MODULE B, SECTIONS**
21 **15 AND 17 WITH RESPECT TO HOW THE MIDWEST ISO WILL PROCESS**
22 **TRANSMISSION SERVICE REQUESTS UNDER THE PROPOSED ENERGY**
23 **MARKETS?**

1 A. No. Under the proposed Tariff the Midwest ISO will continue to perform the
2 same physical analysis regarding the state of the Transmission System when assessing
3 requests for Transmission Service as compared to those practices under Midwest ISO's
4 currently effective OATT. Under the new Tariff, requests for Transmission Service
5 pursuant to the terms and provisions under Module B will continue to be assessed by the
6 Midwest ISO according to the physical attributes of the requested Transmission Service.
7 Once the market commences, the Midwest ISO will still be determining whether there is
8 sufficient Available Transfer Capability ("ATC") available to grant the requested
9 Transmission Service. In its role as the Transmission Provider, the Midwest ISO will
10 continue performing System Impact Studies, when requests for long-term Firm
11 Transmission Service, including both Network Integration and Point-To-Point
12 Transmission Service, are received from customers.

13 The Midwest ISO expects that many requests for Transmission Service under the
14 Energy Markets will be coupled with a simultaneous request for FTRs. In these
15 instances, the Midwest ISO will separately assess the physical attributes of the request
16 (*i.e.* ATC) and whether the requested FTRs are feasible. This process is discussed in
17 more detail in the testimony of Mr. Paul Gribik Exhibit No. _ (MISO- 6).

18 **Q. ARE EXISTING POINT-TO-POINT AND NETWORK TRANSMISSION**
19 **SERVICES PRESERVED?**

20 A. Yes. Under Module B Point-To-Point Transmission Service is available as an option for
21 those Transmission Customers seeking to facilitate internal bilateral transactions under
22 Module C of the Tariff. Point-to-Point Transmission Service is required for Through
23 Transactions and also remains as an optional transmission product for transactions where

1 the source and sink are both within the boundaries of the Transmission Provider Region.
2 As is the case under the current OATT, those customers taking Network Integration
3 Transmission Service are not required to also purchase Point-To-Point Transmission
4 Service.

5 **Q. DOES THE TARIFF CONTAIN MARKET MITIGATION MEASURES?**

6 A. Yes. These provisions can be found in Module D - Market Mitigation Measures.

7 **Q. PLEASE DESCRIBE MODULE D OF THE TARIFF.**

8 A. Dr. David Patton's testimony, Exhibit No. ____ (MISO-10) ("Patton Testimony")
9 describes the relationship between market design and the market power Mitigation
10 Measures administered by the Midwest ISO's Independent Market Monitor. Briefly, the
11 provisions of Module D, the Market Power Mitigation Measures in the Tariff, are derived
12 from the current provisions Attachments S and S-2 in the OATT. Module D also
13 includes the revisions directed by the Commission in its orders in Docket No.
14 ER03-323-000,⁶ as further discussed in the Patton Testimony. Some minor format and
15 section number referencing revisions were made in order to conform Module D with the
16 other modules in the Tariff.

17 The Midwest ISO found it important to make Module D a stand-alone module.
18 This is appropriate because it provides added emphasis on these provisions and is
19 especially necessary with the implementation of the Energy Markets.

20 **Q. DOES THE TARIFF CONTAIN RESOURCE ADEQUACY PROVISIONS?**

21 A. Yes. These provisions are included as Module E – Resource Adequacy of the Tariff.

22 **Q. PLEASE DESCRIBE MODULE E OF THE TARIFF.**

⁶ *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,280 (2003).

1 A. The Midwest ISO’s resource adequacy approach, as provided under Module E, will be based
2 on the existing long term reliability mechanisms of the states within the Midwest ISO Region
3 and the Regional Reliability Organizations (“RROs”), as adapted to the Energy Market. The
4 Midwest ISO will work with individual states to assure applicable mechanisms are in place to
5 provide for long-term resource adequacy. The McNamara Testimony describes the interim
6 approach adopted that the Midwest ISO will use at the onset of the market to address
7 resource adequacy requirements in Module E. The work plan, including a time-table for
8 implementing a long-term solution, is attached as Exhibit Nos. ____ (MISO-2, 3) to the
9 transmittal letter accompanying this filing.

10
11 **III. DEVELOPMENT OF MODULE C**

12 **Q. PLEASE DESCRIBE THE PROCESS LEADING TO THE FILING OF MODULE**
13 **C OF THE TARIFF.**

14 A. The process for developing Module C began some time ago and relied on a number of
15 sources, including the Midwest ISO Market Rules, developed using the stakeholder
16 process, and the market protocols. The Midwest ISO also borrowed from certain aspects
17 of the PJM Interconnection, LLC Open Access Transmission Tariff in developing the
18 terms and provisions embodied in Module C.

19 The Midwest ISO originally filed an Energy Market Tariff on July 25, 2003. That
20 Tariff was subsequently withdrawn by the Midwest ISO on October 17, 2003 pursuant to
21 direction provided to the Midwest ISO by the Advisory Committee. On October 29,
22 2003 the Commission accepted the motion to withdraw the Tariff and provided guidance

1 on several critical issues.⁷ The development of Module C, however, has at its core many
2 of the elements dating back to the July 25, 2003 filing.

3 The first draft of Module C was distributed to stakeholders for review and
4 comment on April 29, 2003. On May 19-20, 2003, the Midwest ISO hosted a technical
5 conference focusing on the terms and provisions embodied in Module C. Based on the
6 feedback received from our stakeholders, the Midwest ISO began to revise Module C.
7 Several stakeholders mentioned that the initial draft of Module C included more detail
8 than the current version of the Market Rules and also expressed sentiment in favor of
9 Midwest ISO's hosting additional technical conferences on the provisions in Module C.

10 Subsequent to these meetings, the Midwest ISO published a more detailed set of
11 Market Protocols on June 12, 2003, which superseded the initial draft of the Market
12 Rules. An additional technical conference was held on June 23-24, 2003 to discuss the
13 Market Protocols with the stakeholders.

14 A revised draft of Modules A, B, C, and D, along with other relevant changes,
15 was sent to Midwest ISO stakeholders on June 19, 2003. A second technical conference
16 on the Tariff was held on July 1, 2003, and a small *ad hoc* group, referred to as the
17 Market Protocols Task Force ("MPTF"), was assembled to conduct a detailed review of
18 the Market Protocols on July 7-8, 2003. On July 3, 2003 a second draft version of the
19 complete Tariff was forwarded to stakeholders for further review and comment. This
20 second draft of the Tariff incorporated comments received from stakeholders, as well as
21 other enhancements deemed necessary by the Midwest ISO. Final comments on the

⁷ Guidance Order, 105 FERC ¶ 61,145.

1 Tariff were received from stakeholders on July 11, 2003 and incorporated into the Tariff
2 as appropriate.

3 As stated earlier, the July 25, 2003 filing was withdrawn by the Midwest ISO
4 after the issuance of the Guidance Order⁸ in ER03-1118-000. Following that Order, the
5 Midwest ISO concentrated its efforts on working with stakeholders to resolve Energy
6 Market related gaps, design issues and other areas requiring further detail or clarification
7 in order to file a comprehensive revised Tariff. As explained by Mr. Richard Doying in
8 his testimony (Exhibit No. ___ (MISO-8) (“Doying Testimony”), the Midwest ISO also
9 developed an extensive stakeholder process to address two major areas on which the
10 Commission provided guidance - Control Area roles/responsibilities and the treatment of
11 Grandfathered Agreements.

12 At the Market Subcommittee meeting on November 6, 2003, the Midwest ISO
13 presented its plan for addressing the stakeholder process in order to resolve Energy
14 Market related gaps, design issues and areas of the July 25, 2003 Tariff requiring further
15 detail or clarification. The Markets Subcommittee (“MSC”) of the Advisory Committee
16 was defined as the primary forum where high-level policy decisions would be made,
17 especially on gaps in the July 2003 version of the Tariff. These areas included market
18 power mitigation measures, initial FTR allocation/nomination methodology, pro forma
19 System Support Resources (“SSR”) agreement and compensation provisions,
20 creditworthiness provisions, and a marginal losses crediting mechanism. As stated earlier
21 in my testimony, those provisions regarding creditworthiness and financial assurance

⁸ 105 FERC ¶ 61,145.

1 requirements were addressed by the Control Area Working Group (“CAWG”) and the
2 Advisory Committee in separate stakeholder forums.

3 The Midwest ISO set an ambitious schedule in consultation with its stakeholders
4 with a primary focus on the MSC in order to address the remaining issues. Numerous
5 meetings, in a variety of forums, were held during the fourth quarter of 2003 and
6 continuing through the first quarter of 2004. Draft copies of Modules C and D, the
7 definitions in Module A, and the relevant EDR procedures, were made available to
8 stakeholders on February 11, 2004, and two weeks later a draft of the entire proposed
9 Tariff was posted on the Midwest ISO website. The Midwest ISO received several sets
10 of comments electronically, and on March 10-11, 2004 a pre-filing conference was held
11 to elicit further comment and feedback. The Doying Testimony provides more detail on
12 stakeholder input in designing the Energy Markets and the development of overarching
13 policy.

14 Other working groups and meetings were set to devote time to address issues
15 related to Control Area roles/responsibilities and the treatment of Grandfathered
16 Agreements under the Energy Market.

17 The operational responsibilities of the Midwest ISO and the interface with
18 Control Areas was discussed in the concerted efforts of the CAWG. The attached
19 testimony of Joseph Gardner, Exhibit No. ____ (MISO-7) documents the definition of the
20 split of NERC functions and operational responsibilities the between the Control Areas
21 and the Midwest ISO. The Midwest ISO is also filing revisions to Appendix E of the
22 Transmission Owners Agreements (“TOA”) in order to incorporate into the TOA the new
23 functional split based on the NERC Functional Model.

1 A series of meetings were held during the latter part of 2003 and the first quarter
2 of 2004 consistent with the direction provided to the Midwest ISO in the Guidance Order
3 to seek input from grandfathered contract holders and the OMS in addressing issues
4 related to the treatment of Grandfathered Agreements under the Tariff. The McNamara
5 Testimony and the testimony of Dr. William Hogan (Exhibit No. ____ (MISO-5)) expound
6 on the direction the Midwest ISO is taking with respect to Grandfathered Agreements,
7 and the associated rationale for this approach, as proposed in the Tariff.

8 **Q. WHAT ROLE DID THE MARKET PROTOCOLS PLAY IN DEVELOPING**
9 **MODULE C?**

10 A. At this time, the Market Protocols document is no longer applicable, having been
11 replaced by the Business Practices Manuals. The Business Practice Manuals are in the
12 early stage of development and the Market Practices Task Force is the primary
13 stakeholder forum where the detailed practices and procedures continue to be developed.
14 As policy level decisions were made and the Midwest ISO presented approaches for
15 dealing with market design issues to the Markets Subcommittee, detailed language was
16 added to the Market Protocols to reflect the policy and intent of the market design
17 component at issue. Once the detailed protocols language was vetted by the Market
18 Practices Task Force, this document served as the basis for drafting the necessary rates,
19 terms and conditions proposed in Module C of the Tariff.

20 **Q. WHAT ROLE DO THE MARKET PROTOCOLS PLAY NOW?**

21 A. The Market Protocols has served its intended purpose as the document supporting the
22 development of both the Tariff and the Business Practices Manuals. There is, therefore,
23 no need for further releases of the Market Protocols since the Business Practices Manuals

1 will now be the primary tool for stakeholders to “drill down” into the practices and
2 procedures at a greater level of detail than that contained in the Tariff. I note that these
3 manuals are subject to the further refinement based on input and stakeholder process
4 from the Market Practices Work Group.

5 **Q. PLEASE DESCRIBE THE LEVEL OF DETAIL CONTAINED IN MODULE C.**

6 A. Module C contains those rates, terms and conditions necessary to effectuate service under
7 the proposed Energy Markets and the FTRs. Module C has been adapted as needed,
8 using the appropriate defined terminology, formatting and language required to constitute
9 a Commission approved rate schedule, or in this case a critical component of the Tariff.

10 **Q. HAS THE MIDWEST ISO DEVELOPED ITS BUSINESS PRACTICES**
11 **MANUALS?**

12 A. Yes. An initial draft of the Business Practice Manuals was made available to
13 stakeholders on January 20, 2004, which continue to be revised.

14 **Q. WHAT IS THE PURPOSE AND ROLE OF THE BUSINESS PRACTICES**
15 **MANUALS?**

16 A. The Business Practices Manuals provide additional detail for Market Participants to
17 supplement the rates, terms and conditions specified in the Tariff. These manuals are
18 intended to provide stakeholders with additional detail and serve as a reference for the
19 day-to-day functions of the Energy Markets. In many cases within Module C of the
20 Tariff, there are references to detailed policies and procedures that will be included in
21 sufficient detail and published prior to the start of the Energy Market on December 1,
22 2004.

1 **Q. PLEASE DESCRIBE THE EVOLVING AND INTERRELATED NATURE OF**
2 **THE BUSINESS PRACTICES MANUALS AND THE TARIFF.**

3 A. The Business Practices Manuals developed by the Midwest ISO provide: background
4 information, guidelines, business rules and processes established for the operation and
5 administration of the different Midwest ISO markets; provisions for transmission security
6 services; and, provisions for compliance with Midwest ISO settlements, billing, and
7 accounting requirements. In contrast, the Tariff is a much higher-level document and
8 contains only those rates, terms and conditions necessary to effectuate service.

9 For example, the Day-Ahead Business Practices Manual provides details
10 regarding the day-ahead scheduling time line beginning 30 days prior to the Operating
11 Day, 7 days prior to the Operating Day, 3 days prior to the Operating Day, and 2 days
12 prior to the Operating Day. This timeline detail is important as the Operating Day grows
13 nearer in order for the Midwest ISO, acting as the Transmission Provider, to ensure that
14 there are sufficient Resources available to meet forecasted load. These events that
15 commence a month in advance of the Operating Day do not have a direct financial
16 consequence and need not be in the Tariff; they are not rates, terms and conditions
17 necessary to effectuate service under the Tariff. Rather, this is a level of detail required
18 in the Business Practices Manual.

19 By contrast, Module C establishes the terms and conditions of service relating to
20 the Day-Ahead and Real-Time Energy Markets and FTRs because the related scheduling
21 provisions and the related input to the Day-Ahead processes have a direct effect on the
22 rates, terms and conditions. In short, whatever occurs in the Day-Ahead and Real-Time

1 Energy Markets has a direct and measurable financial impact on Market Participants and
2 needs to be in the Tariff.

3 While there is some overlap between the level of detail in the Business Practices
4 Manual and the Tariff, only rates, terms and conditions of service have been included in
5 the Tariff. The Business Practices Manuals provide the Midwest ISO and Market
6 Participants with much needed flexibility, in that a change to the provisions contained
7 therein does not impact the rates, terms and conditions of service and can therefore be
8 revised without requiring a filing at the Commission.

9 **Q. PLEASE DESCRIBE THE CHANGES REQUIRED FOR SCHEDULE 16 – FTR**
10 **ADMINISTRATIVE COST RECOVERY ADDER.**

11 A. The terms of Schedule 16 were changed to make Market Participants who are the holders
12 of FTRs as defined under Module C of the Tariff the entity financially responsible for the
13 payment of Midwest ISO's costs of administering FTRs. Previously, under the current
14 OATT, Transmission Customers, Transmission Owners and Users of the Transmission
15 System were responsible for payment of Schedule 16 charges. Under Module C, Market
16 Participants that are the holders of FTRs will be responsible for the payment of Schedule
17 16. The form of service agreement at the back of Schedule 16 was also deleted because it
18 is replaced by Attachment W, the Market Participant Agreement. The Market Participant
19 Agreement, once executed by the Market Participant, will establish the Market
20 Participant as the entity responsible for payment of Schedule 16.

21 **Q. PLEASE DESCRIBE THE CHANGES REQUIRED FOR SCHEDULE 17 –**
22 **ENERGY MARKET SERVICES ADMINISTRATIVE COST RECOVERY**
23 **ADDER.**

1 A. The terms of Schedule 17 were changed to make Market Participants the party
2 responsible for the payment of Midwest ISO's costs of administering the Energy Market
3 under Module C. Previously, "System Participants" were responsible for Schedule 17
4 charges. The term "System Participants," however, has been made obsolete by the advent
5 of the term "Market Participant". The form of service agreement at the back of Schedule
6 17 was also deleted and replaced by Attachment W, the Market Participant Agreement.
7 Once executed by the Market Participant, Attachment W will establish the Market
8 Participant as the entity responsible for payment of Schedule 17. Those Market
9 Participants whose Bids and Offers settle in the Day-Ahead and Real-Time Energy
10 Markets will pay Schedule 17 charges.

11 **IV. RESOLUTION OF MISCELLANEOUS TARIFF CLARIFICATION**
12 **ISSUES**
13

14 **Q. IN ADDITION TO FERC'S ORDER PROVIDING GUIDANCE TO THE TARIFF**
15 **FILED ON JULY 25, 2003, IN DOCKET NO. ER03-1118-000, WHAT OTHER**
16 **CHANGES WERE MADE TO THE TARIFF IN RESPONSE TO INTERVENOR**
17 **COMMENTS?**

18 A. The Midwest ISO went through all the intervenor comments and protests filed in
19 response to the July 25, 2003 Tariff filing and compiled a listing of numerous market
20 design issues that were included in the tariff filing. The Midwest ISO used its best efforts
21 to ensure that these comments were considered, including suggested Tariff clarifications
22 and changes. Many of these changes were addressed at various times throughout the
23 stakeholder process and at a Market Practices Task Force meeting on December 4, 2003.
24 In addition, significant time was devoted to gathering input on, and additional detailed

1 language for, these areas requiring further clarification. Further clarification also was
2 addressed at the Market Practices Task Force meeting held on January 15, 2004.

3 **Q. PLEASE DESCRIBE THE CLARIFICATION CHANGES MADE.**

4 A. These areas of clarifications and/or additional detail added to the Tariff are listed in
5 Exhibit No. ____ (MJV-1).

6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

7 A. Yes.

Midwest Market Initiative

Clarification Issues

Updated 03/22/04

Number of Clarification Issue	Market design element	Description of Stakeholder concern(s)	Action
1	Reliability Must Run Units	Several interveners expressed concern that RMR units will not be included in the Midwest ISO's Energy Markets.	See Module C, Section 38.2.7. The Midwest ISO has not proposed the utilization of Reliability Must Run units and this element will not be included in the Day 2 Market Design. Rather, the Midwest ISO has proposed the use of System Support Resources ("SSRs") as a variant of Reliability Must Run units to reliably operate the grid.
2	Offer Revenue Sufficiency Guarantee	Section 39.2 establishes procedures to insure generators committed in the Day-Ahead Market to receive revenues at least equal to 100% of their Start-Up, No-Load and the integral of their cleared energy offers. The tariff is unclear as to a) how the Midwest ISO will determine what revenues the generator will receive on the day before the Operating Day and b) how these revenues will be collected and from which Market Participants.	See Module C, Sections 39.2.9(f), 39.3.1(c), 40.2.13, and 40.3.3(a)(ii).
3	Generation Resource Aggregation	The Generation Offer rule in Section 39.2.5 states "Generation Offers ... shall be submitted ... only for identified Generation Resources," while the tariff definition for Generation Resource points to a singular electric facility.	See Module A, Section 1.274. The Midwest ISO recognizes Manitoba Hydro's (MH) requirement to be able to deliver energy, representing an aggregation of generation resources, in the market at an External Proxy Bus and will work with MH to address their concern. (Anna/Elizabeth this definition no longer mentions and External Proxy Bus, I thought we were facilitating these transaction through Joe's changes to the definition of Interface)

4	Self-Scheduled Resource	Section 40.2.3 allows a Market Participant in the Post Day-Ahead Process to increase the amount of energy they schedule from the Day-Ahead, but does not allow for a reduction in energy schedule from the Day-Ahead.	See Module C, Sections 38.2.5(d)(ii), 39.1.2, 39.2.6, 40.2.3(b)(viii), and 40.2.16.
5	Scheduling Operating Reserves	Section 41.5.2 states a “Market Participant providing Operating Reserves from a Generation Resource shall submit an hourly MW schedule for Operating Reserve Capacity,” however the tariff lacks detail and does not explain how and where to specify the capacity or how to schedule the capacity for reserves.	The quoted language of concern for the interveners has been removed from the Midwest ISO’s Tariff. See Section 40.2.5. b.
6	Resource Base Point	Section 41.6.2 uses a term “Resource Base Point,” however, this term is not defined.	See Module C, Sections 38.1.6(c)(iv), and 40.2.9 a.
7	Next-Hour Market Service	Section 1.162 defines Next-Hour Market Service as non-firm point-to-point transmission service that is a) reserved for one hour and b) is requested within 60 minutes before the start of the schedule.	The Midwest ISO has removed the term “Next-Hour Market Service” from Module C, so as to reduce the confusion over the usage of the term between Modules B and C.
7	Next-Hour Market Service, cont.	Some stakeholders have inquired about an hourly market along the lines of what occurs in ISOs in New York and California.	All references in the tariff referring to Next-Hour Market Service have been modified to refer to Next-Hour Transmission Service, which is new non-firm transmission product.
9	Self-provided load following	The Midwest ISO proposed to allow Market Participants to designate resources online, submit offers for these resources and be available for dispatch in Real-Time Market activities, in order that the Midwest ISO would not have to commit additional resources in its RAC process to ensure sufficient resources to cover the Market Participant’s load not scheduled in the Day-Ahead process.	The Midwest ISO continues to investigate this issue. Provisions for Self-Provided Load Following have still not been incorporated into the OATT. This capability will not be available for the start of Day 2 Markets.

10	Intermittent Resources Not Dispatchable	Market Participants with Intermittent Resources were concerned with the imposition of uninstructed deviation penalties for Intermittent Resources that are unable to follow a dispatch schedule.	See Module C, Section 40.3.4(d)(i).
12	Block Loaded Units	Interveners wanted more clarity on the Midwest ISO's proposed treatment of block loaded units.	The Midwest ISO continues to investigate this issue. Provisions for Block Loaded Units have still not been incorporated into the OATT. This capability will not be available for the start of Day 2 Markets.
13	Transmission Service Penalties Sections 13.7 and 14.5	The Commission stated that all transmission customers should pay their fair share of the embedded costs of transmission facilities and that efficient usage decisions would be discouraged if penalties were added to the market-clearing prices as proposed.	The Midwest ISO has removed penalty provisions from Sections 13.7 and 14.5.
14	Day-Ahead/Real-Time Offer Linkage	An intervener stated that unaccepted offers in the Day-Ahead should carry over to the Real-Time just as they do in PJM. Section 41.3 allows a Market Participant to increase or reduce the Offer price of Capacity and Energy for the Real-Time that was not selected in the Day-Ahead.	The proposed rules provide no direct link between Day-Ahead and Real-Time Offers. If a Market Participant submits an offer in the Day-Ahead Market that offer will roll-over to the next Day-Ahead Market unless revised by the Market Participant. The Real-Time works in a similar manner; if a Market Participant submits an offer in the Real-Time Market that offer will roll-over to the next Real-Time Market unless revised by the Market Participant. (This is consistent with my understanding of how the offers roll over – MV)
16	Virtual Bids/Offers	Several interveners stated their concern with the Midwest ISO's ability to allow virtual transactions at the start of Day 2.	See Module C, Sections 39.2.4, 39.2.7, 39.2.9(b)(i), 39.2.10, 39.2.11, 39.3.1(c), 39.3.9, and 39.3.5. Virtual Bid and Virtual Supply Offers in the Day-Ahead Energy Market are an essential market design element.
17	Settlements	Section 41.7 states "Real-Time Settlement for non-Metered Resources and Loads is based on estimated MWH values from the State Estimator." It was suggested that the State Estimator should be a fall back and the tariff should be clarified to allow for other means of data collection.	Section 41.7 has been removed from Module C.
18	Reliability Assessment	There was general support for the Reliability	See Module C, Section 40.1. The Midwest ISO uses no

	Commitment Penalties and Costs	Assessment Commitment Process, however, some additional clarity was requested regarding the type of penalties that would apply for resources that do not offer into the Reliability Assessment Commitment, besides the IMM’s penalties for physical withholding. There needs to be a determination of the behavior that would cause the penalties to be incurred. A second concern was expressed on the socialization of the Reliability Assessment Commitment costs over incremental load not scheduled in the Day-Ahead in that this may lead to a socialization of congestion costs.	penalties in the Reliability Assessment Commitment Process, ‘Capacity Resources’ must offer into the Reliability Assessment Commitment Process, other resources can voluntarily offer into the Reliability Assessment Commitment process, and all Market Participants with deviations from their Day-Ahead schedules on a hourly basis will pay the Reliability Assessment Commitment costs.
20	Scarcity Pricing	There was general concern regarding how the Scarcity Pricing would work. Two design elements in particular caused concern. First, that the Midwest ISO proposes a \$5,000/MWh offer cap. The Midwest ISO suggests scarcity pricing rules to achieve energy balance in the Day-Ahead and Real-Time Energy Markets. Second, the Midwest ISO proposed procedures for setting price and achieving the energy balance in both the Day-Ahead and Real-Time Energy Markets when surpluses or shortages exist.	See Module C, Sections 39.2.10, 39.2.11, 40.2.15, and 40.2.16. The Midwest ISO has added provisions for pricing during shortage and surplus conditions.
21	Ancillary Services Scheduling	As the provider of the last resort, the Midwest ISO proposes that Market Participants that have contracted to provide Ancillary Services to load in Control Areas indicate this obligation in the Day-Ahead Market in order that the Midwest ISO can ensure enough resources are scheduled to ensure the short-term reliable operation of the grid. The intervener was concerned of the lack of specificity regarding how the	See Module C, Sections 38.6.3, and 38.6.8(a)(iii).

		responsibility is assigned to the Control Area Operators.	
22	Day-Ahead Market Deadline	A number of interveners called attention to the difference in the deadlines for submission of bids and offers in the Midwest ISO Day-Ahead market (9:00 a.m.) versus PJM (12:00 p.m.).	In adopting the 9:00 a.m. deadline, the Midwest ISO chose this more conservative timeframe in order to allow sufficient time for the software to solve the SCUC and SCED algorithms in the Day-Ahead Market process. The Midwest ISO is continuing to work to improve its systems so it can move toward an 11:00 a.m. deadline. See Section 39.1.
23	LSE Scheduling Flexibility	An intervener expressed concern regarding the clearing of the Real-Time Energy Market in five minute intervals and that the imbalance energy would be charged every five minutes. The Commission wanted further clarity regarding the options Market Participants have in the Midwest ISO Energy Markets.	See Module C, Sections 39.3 and 40.2. Even though the Real-Time Energy Market clears every five minutes, the settlement of imbalance energy occurs on an hourly basis. Furthermore, Market Participants can voluntarily buy or sell energy in the Energy Markets, Market Participants can self-schedule into the Energy Markets, and Market Participants can arrange bilateral transactions outside of the Energy Markets.
26	Nodal versus Zonal Pricing	The Organization of MISO States expressed concern that LMP market prices would have an undesirable effect on retail access programs because these would be zonal prices and not nodal prices that would provide a clear price signal to Market Participants.	A node is the lowest level of granularity used for LMP pricing in the Midwest ISO Energy Market. While Market Participants are permitted the flexibility to define a Load Zone, nodal Locational Marginal Pricing remain available and will be publicly disseminated. While a Market Participant representing a LSE can pay one price based on a load zone definition at the wholesale level, the entities in the Organization of MISO States have the responsibility to decide how the LSE allocates these costs to its retail customers.
8	Outage Scheduling		See Module C, Section 38.2.5(h). The Midwest ISO has clarified these provisions.
11	DRRs		See Module C, Sections 39.2.5 and 40.2.11. The Midwest ISO has clarified these provisions.
15	Definitions cleanup		See Module A. The Midwest ISO has clarified the definitions before filing.
19	Access to Market Data		See Module C, Section 38.9.1. The Midwest ISO has clarified these provisions.

24	Dispatch Instructions		CAWG and the Midwest ISO have developed the proper separation of functions and responsibilities for the Midwest ISO and Control Area Operator operation function.
27	Load Forecasting		CAWG and the Midwest ISO have developed the proper separation of functions and responsibilities for the Midwest ISO and Control Area Operator operation function. See Section 39.2.12.