

DIRECT TESTIMONY OF
DENNIS W. BETHEL
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY
IN MPSC CASE NO. U-12652

1 Q. Please state your name and business address.

2 A. My name is Dennis W. Bethel. My business address is 1 Riverside Plaza,
3 Columbus, Ohio 43215.

4 Q. Please indicate by whom you are employed and in what capacity.

5 A. I am employed by American Electric Power Service Corporation (AEPSC), as
6 Director – Transmission and Interconnection Services.

7 Q. Please briefly describe your educational background and business experience.

8 A. In 1973, I earned a Bachelor of Science Degree in Electrical Engineering from the
9 University of Evansville. I have also completed several post-graduate courses at
10 Ball State University and the American Electric Power System Management
11 Development Program at The Ohio State University. I have 28 years of
12 experience in the electric utility industry, all with the American Electric Power
13 (AEP) System. In 1973 I joined the AEP System as a Commercial and Industrial
14 Engineer in the Customer Service Department of Indiana Michigan Power
15 Company (I&M or Company). In 1977 I transferred to I&M's Rate Department as
16 a Rate Analyst. In that position, I was responsible for the preparation of load
17 research reports, development of class and jurisdictional cost-of-service studies,
18 monthly fuel and purchased power adjustments, wholesale power contract
19 administration and rate design. In 1980 I transferred to the AEPSC Rate Research
20 and Design Division. My responsibilities in AEPSC's Rate Department included

1 supervision of projects relating to rate design, rate research, jurisdictional and
2 class cost-of-service studies, load research, contracts and special rate studies. In
3 1988, I transferred to the System Transactions Department, and was promoted to
4 Manager - Interconnection Agreements in 1991, then to Manager – Transmission
5 Contracts and Regulatory Support in 1997. I assumed my present position in June
6 2000.

7 Q. What are your duties and responsibilities as Director – Transmission and
8 Interconnection Services?

9 A. In my present position I am responsible for coordinating the development and
10 implementation of transmission, interconnection and related agreements, and
11 AEP's Open Access Transmission Tariff (OATT). I am also responsible for the
12 development of cost of service and rate design studies for transmission and
13 ancillary services, and for the development and coordination of regulatory filings
14 with the Federal Energy Regulatory Commission (FERC) relating to the rates,
15 terms and conditions of the OATT, interconnection and other agreements. I
16 represent AEP on the tariff working groups of the Alliance RTO and the
17 Southwest Power Pool.

18 Q. Do you hold any professional licenses?

19 A. Yes, I am registered as a Professional Engineer in the States of Indiana and Ohio.

20 Q. Have you previously testified on electric rate issues before any utility regulatory
21 commissions?

22 A. Yes, I have presented testimony on various cost-of-service and rate design issues
23 before the utility regulatory commissions of Michigan, Kentucky, Ohio, West

1 Virginia, and Tennessee. I have also testified before the FERC in two cases
2 involving transmission and ancillary services -- FERC Docket Nos. ER93-540-
3 000 and ER98-2786-000.

4 Q. What is the purpose of your testimony in this proceeding?

5 A. My testimony in this proceeding is to support the Transmission Plan for the
6 implementation of Customer Choice as specifically presented in Section B
7 subsections 2, 3, 4, 5, & 6, Section F subsection 4b, Section H subsection 3, and
8 Section J subsection 1g of AEP's Restructuring Implementation Plan filed with
9 the MPSC on October 2, 2000. I&M plans to meet the transmission and ancillary
10 services needs of retail consumers who choose an alternative supplier of energy. I
11 also discuss and support a method of calculation of the portions of I&M's revenue
12 that would be satisfied by the AEP OATT, if all retail customers took service
13 under that tariff. I will also support Michigan's retail share of AEP's Estimated
14 Alliance RTO Annual Administrative Costs for the period 2002-2007.

15 Q. What exhibits are you sponsoring in this proceeding?

16 A. I am sponsoring Exhibit A-___ (DWB-1), Summary of AEP East Zone Open
17 Access Transmission and Ancillary Service Rates, Exhibit A-___ (DWB-2),
18 I&M's Estimated OATT Revenues, and Exhibit A-___ (DWB-3), AEP's
19 Michigan Retail Share of Estimated Alliance RTO Annual Administrative Costs.

20 Q. Were these exhibits prepared by you or under your supervision?

21 A. Yes.

1 Q. What is your recommendation regarding how the Commission can determine the
2 amount of revenue that will be realized from Michigan customers through
3 application of the OATT?

4 A. In my opinion, the most logical and reliable way to calculate the amount of
5 revenue that AEP could realize if all Michigan retail customers were to take
6 transmission service under the OATT is to apply the Network Integration
7 Transmission Service (NTS) rate to the aggregate load of I&M's customers. The
8 OATT offers two forms of transmission service, NTS and Point-to-Point (PTP)
9 transmission. PTP service requires a separate advance reservation of transmission
10 capacity in whole megawatts (MW) for each transaction, consisting of a
11 designated point of receipt (POR) and point of delivery (POD). Under NTS, an
12 electric supplier is charged for transmission service based on the aggregate
13 coincident peak load of the consumers that name that Alternative Electric
14 Supplier as their supplier each billing period, without the need to make and pay
15 for specific advance capacity reservations. NTS also allows the customer to
16 designate any firm power supply as a network resource, and receive the highest
17 delivery priority. Any other (non-firm) power supply will be delivered with the
18 second highest delivery priority. There are no separate charges for delivery of
19 firm or non-firm network resources, only the charges based on the load coincident
20 to the system peak. Charges for PTP service, on the other hand, are based on the
21 amount of transmission capacity reserved before the fact. Before the fact
22 reservations require the electric supplier to estimate the maximum amount of
23 power that its customers will need, and pay for that amount whether the load

1 actually reaches that level or not. In addition, if the load exceeds the reserved
2 capacity, a penalty of up to 100% of the applicable rate may be assessed. PODs
3 within the AEP control area can be aggregated for PTP service under the OATT,
4 making it possible to include more than one consumer under a reservation, but the
5 reserved capacity must satisfy the customer's non-coincident peak demand. For
6 these reasons, NTS is expected to be the transmission service of choice for retail
7 energy providers.

8 Q. If some electric suppliers and/or consumers do elect to use PTP transmission
9 service, will an estimate of transmission service revenues based on NTS still be
10 reasonable?

11 A. Yes. In my experience, the only electric suppliers and consumers that are likely
12 to rely on PTP transmission will be those that can achieve a lower cost for
13 transmission service because they rely in part on generation behind-the-meter.
14 Under NTS the transmission charges are based on total load, not counting behind-
15 the-meter production. In any case, since the rate for firm PTP transmission is
16 based on the same revenue requirement as is the NTS rate, the difference in
17 charges for such customers compared to NTS service will be minimal, and AEP's
18 estimated revenues will be conservative, i.e., higher than actual.

19 Q. What transmission rates will be applicable for consumers in AEP's Michigan
20 service area when retail choice begins?

21 A. AEP expects to transfer control of its transmission system to the Alliance RTO by
22 December 15, 2001. The Alliance RTO will provide transmission under a new
23 OATT that will include an AEP zone. AEP plans to file proposed transmission

1 and ancillary service rates this summer (2001) that will be applicable for service
2 in the AEP Zone (the 7-state eastern AEP service area), upon acceptance by
3 FERC and the commencement of Alliance RTO operations. Until the new
4 Alliance RTO OATT becomes effective, AEP's present OATT rates will be
5 applicable. A summary of AEP's present transmission and ancillary service rates
6 is contained in Exhibit A-___ (DWB-1).

7 Q. What is the status of the Alliance RTO proposal?

8 A. The Alliance RTO proposals have been substantially approved by the FERC, and
9 the RTO is expected to begin providing transmission service over the facilities of
10 AEP and nine other transmission providers by December 15, 2001.

11 Q. What rates will be applicable under the Alliance RTO for transmission customers
12 taking service in AEP's Michigan service area?

13 A. The Alliance RTO transmission rates, for load connected to the transmission
14 system in AEP's Michigan service area, will include AEP's "zonal facilities
15 charge" and charges to collect revenues that would otherwise be lost by other
16 transmission providers in the Alliance RTO and Midwest ISO regions, due to the
17 elimination of multiple contract path charges. Under a settlement between the
18 Alliance RTO and the Midwest ISO, approved recently by the FERC,
19 transmission customers will pay only the rate of the zone where they are
20 connected to obtain access to the transmission system of the entire Alliance/MISO
21 region. AEP's transmission revenues from retail consumers in Michigan, under
22 the Alliance RTO zonal rate design, will be equal to the revenues produced by the
23 zonal facilities charge portion of the zonal rate.

1 Q. Will the zonal facilities charge portion of the Alliance RTO rate for the AEP zone
2 be based on AEP's present transmission rate?

3 A. No. AEP expects to propose changes in its zonal facilities charge in a filing this
4 summer (2001). Until the FERC acts on that proposal, the present rates will be
5 the applicable transmission rates in the AEP zone.

6 Q. What is your recommendation regarding how the Commission can determine the
7 amount of revenue that will be obtained from Michigan customers through
8 application of the OATT?

9 A. Presently, the best estimate of the revenues that AEP can be expected to realize
10 from Michigan customers who take unbundled transmission service under the
11 OATT after the start of retail choice is to apply AEP's present rates for NTS to
12 the aggregate Michigan load.

13 Q. Have you prepared an estimate of the revenue that may be realized from I&M
14 customers under the OATT, using the presently effective NTS rate?

15 A. Yes. Please see Exhibit A-___ (DWB-2), consisting of two pages.

16 Q. Please describe Exhibit A-___ (DWB-2).

17 A. During I&M's test year for its last retail rate case the I&M Michigan retail load
18 represented 1.5781% of the AEP total transmission load, and, under the OATT
19 would be responsible for \$5,518,743 of the AEP System transmission revenue
20 requirement. Page 1 of the exhibit shows, in Column 1, the 12-month average
21 I&M load coincident to the AEP System transmission firm peak loads. Column 2
22 shows the portion of the AEP System transmission revenue requirement
23 associated with the I&M Michigan loads. Under AEP's OATT, NTS customers

1 are charged for transmission service based on their Load Ratio Share (LRS) of the
2 total Transmission System firm peak load. Referring to page 2 of Exhibit A-____
3 (DWB-2), the I&M Michigan test year coincident peak load (288 MW) was
4 determined by multiplying the total I&M load coincident to the AEP System firm
5 peak demands (2,856 MW) by the I&M retail load responsibility factor
6 (10.0732%) as used in Case No. U-9656. The I&M Michigan load ratio share
7 (1.5781%) was determined by dividing I&M's Michigan coincident load by the
8 total AEP System 12-month average firm load (18,250 MW).

9 Individual class loads, and in turn, their transmission revenue
10 responsibilities, were derived based on load research information. As shown on
11 Page 2 of Exhibit A-____ (DWB-2), class load research, adjusted for losses,
12 resulted in a total I&M load coincident to the AEP System peaks of 289,946 kW.
13 The load research derived class loads were adjusted uniformly to match the
14 288,000 kW total derived from the total I&M load and the I&M Michigan retail
15 allocation factor.

16 Q. Have you also prepared estimates of the revenue associated with retail customers'
17 usage of ancillary services?

18 A. Yes, I have. Columns 3 and 4 of page 1 of Exhibit A-____ (DWB-2) show these
19 calculations for the five ancillary services that are applicable. The rates for these
20 five services are stated in \$ per MW per month for PTP and NTS customers. The
21 combined charges for the applicable ancillary services total \$342.71 per MW per
22 month (\$0.34271 kW-month).

23 Q. What are the five ancillary services?

1 A. The five ancillary services are: Scheduling, System Control and Dispatch Service
2 (OATT Schedule 1), Reactive Supply and Voltage Control from Generation
3 Sources Service (Schedule 2), Regulation and Frequency Response Service
4 (Schedule 3), Operating Reserves – Spinning Reserves Service (Schedule 5), and
5 Operating Reserves – Supplemental Reserves Service (Schedule 6). Until the
6 RTO commences operation of a market for these ancillary services, they will be
7 offered in AEP's control area under rates such as those in the present AEP
8 OATT that are based on AEP's production capacity costs.

9 Q. How will differences between the amount of energy supplied by a retail electricity
10 provider and the load of its customers be handled?

11 A. Energy Imbalance Service will be provided under the OATT. FERC's RTO rules
12 require the RTO to provide this service through a competitive market structure.
13 To better accommodate retail choice implementation where it occurs in advance
14 of RTO operations, AEP has filed a special Retail Energy Imbalance Service
15 provision (Schedule 4-A) that is applicable until the RTO takes over provision of
16 service. The new Schedule 4-A settles imbalances based on AEP incremental or
17 avoided costs, as applicable; provided that customers make day-ahead energy
18 delivery schedules that conform to daily load forecasts provided by AEP.

19 Q. Have you included any costs or revenues for Energy Imbalance Service in your
20 Exhibit A-____ (DWB-2)?

21 A. No. Energy Imbalance Service will either be provided by the RTO through a
22 competitive market structure, or AEP will provide it under the new Schedule 4-A.
23 In either case, any revenues that AEP receives (or must pay out) will be reflective

1 of market prices or out-of-pocket (or avoided) costs. Further, the existing retail
2 bundled rates of I&M do not include charges for this service, so there are no costs
3 to unbundle.

4 Q. Has AEP made any other changes to its OATT to accommodate competition in
5 retail electric sales?

6 A. Yes. Last year AEP proposed, and FERC approved, changes to Sections 2.2
7 (Reservation Priority For Existing Firm Service Customers), 7.1 (Billing and
8 Payments), and 29.2 (NTS Application Procedures), as well as Attachments F
9 (NTS Service Agreement) and H (Special Billing Procedures for Retail NTS) of
10 the OATT. The changes were all designed to make transmission service more
11 “user friendly” for competitive retail applications.

12 Q. Are there any updates or modifications to sections of the October 2, 2000
13 Restructuring Implementation Plan that you are sponsoring?

14 A. Yes. There have been a number of significant FERC orders and filings in the
15 proceedings regarding the Alliance RTO described in Section H.3. of the
16 Company's Restructuring Implementation Plan. On January 24, 2001, the FERC
17 ruled on the Alliance Companies' September 15, 2000 compliance filing and
18 various other filings, Order on Compliance Filing and Providing Further
19 Guidance, Denying Requests for Rehearing, and Rejecting Filing on Alternative
20 Governance Structure. In addition to addressing the Alliance Companies'
21 September 15, 2000 compliance filing, the FERC, in the January 24, 2001 order,
22 offered guidance with respect to the Alliance RTO's compliance with the criteria
23 for RTOs set forth in FERC Order No. 2000. In large part, the Commission found

1 that the Alliance proposal meets the four required characteristics and eight
2 functions specified for RTOs in Order No. 2000. The order required some minor
3 changes to the Alliance proposal, and sought additional information with respect
4 to certain issues. On May 15, 2001 the Alliance Companies made a compliance
5 filing containing the required changes and additional information (except for
6 matters to be addressed in future filings such as the filing for the Alliance
7 Companies' zonal rates and other tariff changes).

8 Prior to the FERC's January 24, 2001 order, two new transmission-owning
9 utilities – Dayton Power and Light Company and Northern Indiana Public Service
10 Company became participants in the Alliance. In addition, three transmission-
11 owning utilities – Commonwealth Edison ("ComEd"), Illinois Power and Ameren
12 Corporation – announced their intention to leave the Midwest ISO ("MISO") and
13 join the Alliance. These utilities filed petitions asking FERC to declare their
14 rights to do so. The remaining MISO transmission owners, the MISO itself, and a
15 number of other parties protested the companies' petitions, arguing that the
16 companies were contractually bound to remain in the MISO or to pay shares of
17 the MISO's development costs. In one such proceeding (*Illinois Power*, FERC
18 Docket No. ER01-123-000), the FERC established a settlement process to address
19 the terms, if any, under which Illinois Power could leave the MISO. The
20 discussions resulted in a settlement that creates an Alliance-MISO "super region"
21 where energy can be transmitted at a single rate. The settlement also allows
22 ComEd, Ameren and Illinois Power to join the Alliance while paying an exit fee
23 that will assure the economic viability of the MISO. It provides for negotiations

1 among the Alliance, the MISO and PJM on a joint rate for transactions involving
2 all three systems. Finally, it includes an Inter-Regional Coordination Agreement
3 (IRCA) which provides for coordinated transmission planning, security
4 coordination, congestion management, independent market monitoring,
5 accommodation of "one-stop shopping" for transmission users, compatible real-
6 time balancing markets, a common generation interconnection agreement,
7 compatible business practices and procedures for resolving real-time operational
8 disputes. In essence, the settlement will provide for a seamless transmission
9 market over a large area stretching from the Dakotas in the West to Coastal
10 Virginia in the East. The settlement will greatly increase the choice of power
11 suppliers to customers in Michigan and elsewhere in the super-region who wish to
12 exercise customer choice. 190,000 MW of generation spread over 16 states will
13 now be accessible at a single transmission rate. Further, the benefits of RTOs
14 outlined by the FERC in Order No. 2000, including enhanced reliability,
15 coordinated planning, etc. will be greatly expanded both by the expanded scope of
16 the Alliance and MISO and by the IRCA. The settlement was approved by the
17 FERC on May 8, 2001.

18 Based on the FERC approvals discussed above and the settlement,
19 activities are underway to achieve commercial operation of the Alliance RTO by
20 the target date of December 15, 2001. This is a massive effort involving the
21 expenditure of millions of dollars and the efforts of numerous Alliance Company
22 employees and contractors for the procurement of computer systems,

1 development of procedures, corporate formation, etc. Also, meetings are taking
2 place to assure stakeholder input into the process.

3 The Alliance Companies are also engaged in preparing the necessary
4 additional FERC filings, including the individual company rate filings which must
5 be made to establish the zonal rates under the Alliance Open Access Transmission
6 Tariff. Finally, discussions are underway with the MISO for the development of
7 procedures and protocols under the IRCA, as called for in the settlement, and
8 discussions are underway with PJM and other RTOs to foster further inter-RTO
9 coordination.

10 Q. Are there any RTO charges that I&M will incur which should be recovered
11 through charges to retail customers continuing to take service under Michigan
12 retail rates?

13 A. Yes. As an update to the October 2, 2000 Implementation Plan filing with regard
14 to Section J.1.g, the Alliance RTO will charge all customers a two-part
15 Administrative fee to recover start-up and on-going operations costs. Exhibit A-
16 ____ (DWB-3), illustrates a method that can be used to estimate the expense I&M
17 may incur based on the retail load served by I&M in Michigan during the year
18 2000. As noted in that Exhibit, the RTO costs and I&M allocations are estimated
19 values. Company Witness DeLizio has used the estimated cost provided by this
20 Exhibit as part of the calculation of the Implementation Cost Rider. It is my
21 understanding that any such rider would be trued-up to reflect actual incurred
22 expenses. The annual true-up mechanism is supported by Company Witness
23 Curry.

- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes.