

93-7000-EL-FAD<sup>21</sup>

**FILE**

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

FirstEnergy Operating Companies, *et al.* : Docket Nos. ER01-1403-006  
ER06-1443-002  
ER04-366-005  
ER01-2968-007  
ER01-845-006  
ER05-1122-004  
ER08-107-001

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**REQUEST FOR FURTHER CONSIDERATION AND ANALYSIS,  
AND  
OPPOSITION TO REQUEST FOR WAIVER  
SUBMITTED ON BEHALF OF  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

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## **Executive Summary**

The Public Utilities Commission of Ohio (“Ohio” or “Ohio Commission”) provides an analysis which shows that FirstEnergy fails the market share screen taking in to account certain factual conditions and circumstances. The Federal Energy Regulatory Commission (“FERC” or “Commission”) should require FirstEnergy to conduct and submit a delivered price screen before deciding whether to grant FirstEnergy continuing market based rate authority from 2009 through 2011.

## **Discussion**

### **Market Power Screens**

FirstEnergy submitted its market power analysis update requesting a grant by the Commission of continuing market based rate authority on January 14, 2008, pursuant to Order 697<sup>1</sup>. This discussion bears upon the screens and related analyses most relevant to Ohio, which uses the MISO footprint as the relevant geographic market.

FirstEnergy’s filing does not account for at least four facts or circumstances, each of which causes the results of the market screens to tend significantly toward failure: 1) the expiration of a power sales agreement committing its generation to native load; 2) the acquisition of the Fremont Energy Facility; 3) the unavailability and/or undeliverability of MISO generation to compete with FirstEnergy uncommitted generation; and 4) import limitations into the FirstEnergy zone.

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<sup>1</sup>

18 C.F.R. § 35.37 (2008).

FirstEnergy's analysis does not account for the expiration of a power sales agreement between FirstEnergy Solutions and its affiliated operating companies, Ohio Edison, Toledo Edison, and The Illuminating Company. The power sales agreement expires on December 31, 2008, and FirstEnergy has no commitment to serve native load beyond that date. Adjusting the market share analysis for this circumstance increases FirstEnergy's uncommitted generation by 6,893 megawatts for the summer season, 5,791 for the fall season, 6,375 megawatts for the winter season, and 5,744 megawatts for the spring season.

FirstEnergy is currently in the process of acquiring the Fremont Energy Facility located in Sandusky County, Ohio, from the Calpine Corporation. On March 3, 2008, the Ohio Power Siting Board approved the transfer of the certificate of public convenience and necessity, and related permits authorizing the construction of Fremont from Calpine to FirstEnergy Generation Corporation.<sup>2</sup> New capacity in the amount of 704 megawatts should come online in the next 12 to 18 months,<sup>3</sup> well within the period of market based rate authority that would be occasioned by the instant market screens. Adjusting the

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<sup>2</sup> *In the Matter of the Application of Fremont Energy Center LLC for a Certificate of Environmental Compatibility and Public Need for a Merchant, Combined Cycle, 704-Megawatt Power Plant in Sandusky County, Ohio*, Ohio Power Siting Board Case No. 00-1527-EL-BGN (Entry) (March 3, 2008) (<http://dis.puc.state.oh.us/TiffToPDF/A1001001A08C03B64442E58165.pdf>).

<sup>3</sup> "Calpine has indicated in court documents that the plant is about 70 percent complete and could take 12 to 18 months ... to become operational." FIRSTENERGY SUBSIDIARY TO PURCHASE NATURAL GAS COMBINED-CYCLE PLANT IN NORTHWEST OHIO, [http://www.firstenergycorp.com/NewsReleases/2008-01-29\\_FirstEnergy\\_Subsiadiary\\_To\\_Purchase\\_Natural\\_Gas\\_Co.pdf](http://www.firstenergycorp.com/NewsReleases/2008-01-29_FirstEnergy_Subsiadiary_To_Purchase_Natural_Gas_Co.pdf)

market share analysis to account for the Fremont project will add 704 megawatts to FirstEnergy's uncommitted capacity.

Unless the power sales agreement expiration and the Fremont facility acquisition are taken into account in the instant market screen analyses, new commitments could be negotiated under a false assumption that FirstEnergy lacks market power. Allowing these factors to be reported after the fact as significant changes will be too late. New arrangements could precede the expiration of the contract. These are not speculative future contingencies. Because both the contract expiration and the Fremont acquisition are known factors today, they could, and should, have been taken into account in the analysis.

The filed analysis assumes that all MISO uncommitted generation is available and can be delivered to compete with FirstEnergy's uncommitted generation. This is not the case. In his market power study for the MISO ancillary services market, Dr. David Patton determined that in the MISO central region and FirstEnergy zone, there would be at least one pivotal supplier for 34.4 percent of the time<sup>4</sup>. This is a clear indication that not all MISO generation is deliverable to FirstEnergy where uncommitted FirstEnergy generation could certainly compete, or at least that some MISO generation is not deliverable to FirstEnergy for significant periods of time. Consequently, the relevant market for purposes of analysis is not the entirety of generation in the MISO footprint but rather a subset of that generation. Moreover, MISO has calculated the import limits for FirstEnergy to be 4,779 megawatts for the year 2006, and 4,250 megawatts for the year

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<sup>4</sup> Docket No. ER07-1372-000, *et al.*, Affidavit of David Patton at 18.

2011.<sup>5</sup> Even if competing generation can reach the border of FirstEnergy's territory, there is no guarantee it can compete with FirstEnergy's uncommitted generation.

Ohio has performed its own analysis of FirstEnergy's market share screen. FirstEnergy's results as filed are displayed in Attachment A. Attachment B incorporates the four changes discussed above to FirstEnergy's analysis. The results demonstrate that when FirstEnergy generation is no longer obligated to serve FirstEnergy load, and the Fremont facility is operating, FirstEnergy fails the market share screen in three of the four seasons if only a third of MISO's uncommitted generation is unavailable or undeliverable to compete with FirstEnergy's uncommitted generation. It passes the fourth season by a mere one tenth of a percentage point. The Ohio Commission believes that accounting for these factors will have a similar effect on the pivotal supplier screen. Not enough data is available, however, to make the parallel adjustments to the pivotal supplier screen at this time.

FirstEnergy's analysis should have accounted for the reality that some portion of MISO's uncommitted generation will be undeliverable or unavailable to compete with FirstEnergy's uncommitted generation at any time. Further, the analysis should have accounted for the fact that another percentage of MISO's generation will be unavailable or undeliverable to compete with FirstEnergy's generation at least some of the time. Accounting for intermittent deliverability would necessitate that the results of the analy-

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<sup>5</sup> Midwest ISO, "MTEP 06 Load Deliverability Study Results for East Region Study Group," Power Point Presentation, September 22, 2006, mimeo at p. 6 (attached).

sis be expressed in terms of how often and how much of the time FirstEnergy would be deemed to have market power, much as Dr. Patton has done in his affidavit.

Given that the deliverability of generation is a time differentiated parameter, the Commission should require FirstEnergy to conduct the market power screen that explicitly accounts for time differentiation – the delivered price screen. In the alternative, for purposes of the market share screen and the pivotal supplier screen, a full analysis and accounting of which MISO generation is available and deliverable to compete with FirstEnergy's uncommitted generation should determine the relevant market. If some MISO generation is not available or deliverable for some of the time, that amount of capacity should be prorated or removed from competitors' uncommitted generation to reflect that it is not always deliverable.

### **Request for Waiver**

FirstEnergy Companies seek a waiver from further updates of the market power screens. Ohio opposes this waiver. The additional filings are necessary. Reality on the ground can change quickly. Known facts such as those described above can be overlooked unless there are regular updates and requirements that known facts be accounted for in the updates. If the Commission were to allow these things to be ignored, significant change updates filed after the fact would be too late. New arrangements could already have been negotiated. The exercise of market power could fall between the cracks.

### **Conclusion and Recommendations**

FirstEnergy's market power analyses are inadequate because they ignore known facts and realities. The analyses assume FirstEnergy Solutions generating resources will remain committed to the FirstEnergy operating companies despite the expiration of the contract that commits them. The analyses do not count the capacity of the Fremont Energy Facility. And, they assume that all MISO generation is available and can be delivered to compete with FirstEnergy generation when it cannot. Even if competitors' uncommitted generation is available and deliverable to compete with FirstEnergy's uncommitted generation, it may not be able to compete on the basis of price.

Accounting for known facts and realities significantly changes the calculus of market power for FirstEnergy. Based upon the analyses in Attachment B to this filing, Ohio has shown that when the above factors are taken into account, FirstEnergy fails the market share screen. Ohio therefore recommends the Commission require FirstEnergy to conduct a Delivered Price Screen.

Respectfully submitted,

/s/ Thomas W. McNamee

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**Attorneys for the**  
**Public Utilities Commission of Ohio**

### **CERTIFICATE OF SERVICE**

I hereby certify that the foregoing have been served in accordance with 18 C.F.R. Section 385.2010 upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Thomas W. McNamee

**Thomas W. McNamee**  
Assistant Attorney General

Dated at Columbus, Ohio this March 17, 2008.



## **Attachment A**

The table below portrays the results of FirstEnergy's market share screen in the MISO footprint. No changes have been made to FirstEnergy's filed analysis. It uses the same format as the table in Attachment B, which facilitates comparison with the Ohio Commission's alternative analyses.

## Attachment A: Market Share Analysis (Original FE Filing)

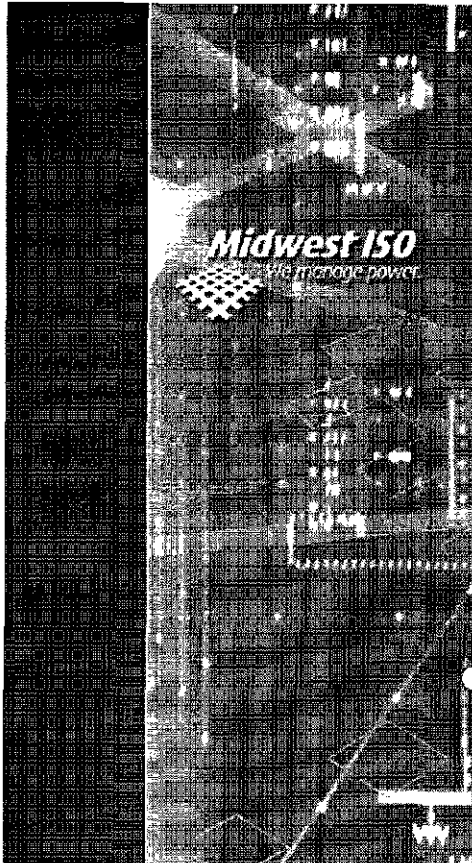
|                               |                              | Season |         |         |         |         |
|-------------------------------|------------------------------|--------|---------|---------|---------|---------|
| No                            | Category                     | Effect | Summer  | Fall    | Winter  | Spring  |
| Calculations of the MP        |                              |        |         |         |         |         |
| 1                             | Nameplate Capacity           | +      | 12,514  | 12,514  | 12,514  | 12,514  |
| 2                             | Long Term Firm Purchases     | +      | 0       | 0       | 0       | 0       |
| 3                             | Imports                      | +      | 0       | 0       | 0       | 0       |
| 4                             | Native Load Committed        | -      | 7,659   | 6,434   | 7,083   | 6,382   |
| 5                             | Operating Reserve            | -      | 294     | 282     | 288     | 281     |
| 6                             | Planned Outages              | -      | 17      | 576     | 261     | 952     |
| 7                             | Long Term Firm Sales         | -      | 0       | 0       | 0       | 0       |
| 8                             | MP Uncommitted Capacity      |        | 4,854   | 5,922   | 4,882   | 4,899   |
| Total Capacity Available      |                              |        |         |         |         |         |
| 9                             | Nameplate Capacity           | +      | 135,752 | 135,752 | 135,752 | 135,752 |
| 10                            | Long Term Firm Purchases     | +      | 0       | 0       | 0       | 0       |
| 11                            | Imports                      | +      | 0       | 0       | 0       | 0       |
| 12                            | Native Load Committed        | -      | 72,728  | 58,667  | 63,294  | 56,997  |
| 13                            | Operating Reserve            | -      | 2,734   | 2,593   | 2,639   | 2,576   |
| 14                            | Planned Outages              | -      | 978     | 6,234   | 3,258   | 8,217   |
| 15                            | Long Term Firm Sales         | -      | 0       | 0       | 0       | 0       |
| 16                            | Σ Other Uncommitted Capacity |        | 59,312  | 68,258  | 66,561  | 69,962  |
| 9+10+11-12-13-14-15           |                              |        |         |         |         |         |
| 17                            | Total Available Capacity     |        | 61,558  | 75,480  | 70,443  | 74,551  |
| Total Load Committed Capacity |                              |        |         |         |         |         |
|                               |                              |        | 7+1%    | 7+1%    | 6.8%    | 6.5%    |
|                               |                              | PASS   | PASS    | PASS    | PASS    | PASS    |

## **Attachment B**

The table below, labeled Case 1, portrays FirstEnergy's filed market share analysis with the following changes, which were discussed in the text.

1. 6893, 5791, 6375, and 5744 megawatts of seasonal generation currently obligated by contract to serve FirstEnergy's Ohio native load were removed from the "Native Load Committed" category and added to the "MP Uncommitted" category to reflect the expiration of that contract. These numbers equal 90% of FirstEnergy's filed seasonal "Native Load Committed" in order to reflect that Penn Power, a FirstEnergy subsidiary, is not included in this analysis. Ohio load is at least 90% of the FirstEnergy MISO load.
2. 265, 256, 259, and 253 megawatts of seasonal reserves requirements were removed from Operating Reserves to reflect the reduction in generation committed to serve FirstEnergy's Ohio native load and added to the "MP Uncommitted" category.
3. 704 megawatts were added to both "Nameplate Capacity" and to "MP Uncommitted Capacity" to reflect the acquisition by FirstEnergy of the Fremont Energy Facility.
4. One third of the megawatts were removed from "Other Uncommitted Capacity" to reflect that a third of MISO uncommitted capacity was not available or not deliverable to compete with FirstEnergy's uncommitted capacity.

| Attachment B: Market Share Analysis (Case 1) |                              |        |         |         |         |         |                           |          |  |
|--|------------------------------|--------|---------|---------|---------|---------|---------------------------|----------|--|
|  |                              | Season |         |         |         |         |                           |          |  |
| No   | Category                     | %      | Summer  | Fall    | Winter  | Spring  | Calculation               | Comments |  |
| Calculations of the MP                       |                              |        |         |         |         |         |                           |          |  |
| 1  | Nameplate Capacity           | 100%   | 13,218  | 13,218  | 13,218  | 13,218  |                           |          |  |
| 2  | Long Term Firm Purchases     | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 3  | Imports                      | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 4  | Native Load Committed        | 10%    | 766     | 643     | 708     | 638     |                           |          |  |
| 5  | Operating Reserve            | 10%    | 29      | 28      | 28      | 28      |                           |          |  |
| 6  | Planned Outages              | 100%   | 17      | 576     | 261     | 952     |                           |          |  |
| 7  | Long Term Firm Sales         | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 8  | MP Uncommitted Capacity      |        | 12,905  | 11,970  | 12,220  | 11,500  | 12,905                    |          |  |
| Calculations of the MP                       |                              |        |         |         |         |         |                           |          |  |
| 9  | Nameplate Capacity           | 100%   | 135,752 | 135,752 | 135,752 | 135,752 |                           |          |  |
| 10   | Long Term Firm Purchases     | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 11   | Imports                      | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 12   | Native Load Committed        | 100%   | 72,726  | 58,667  | 63,294  | 56,997  |                           |          |  |
| 13   | Operating Reserve            | 100%   | 2,734   | 2,593   | 2,639   | 2,576   |                           |          |  |
| 14   | Planned Outages              | 100%   | 978     | 6,234   | 3,258   | 6,217   |                           |          |  |
| 15   | Long Term Firm Sales         | 100%   | 0       | 0       | 0       | 0       |                           |          |  |
| 16   | Σ Other Uncommitted Capacity | 67%    | 39,637  | 45,601  | 44,370  | 48,637  | 67% (9+10+11-12-13-14-15) |          |  |
| 17   | Total Uncommitted Capacity   |        | 51,143  | 57,471  | 56,589  | 58,136  | 51,143                    |          |  |
| MP Share                                     |                              |        |         |         |         |         |                           |          |  |
| 18   | MP Share                     |        | 23.9%   | 20.8%   | 21.5%   | 19.9%   |                           |          |  |
|  |                              |        | FAIL    | FAIL    | FAIL    | PASS    |                           |          |  |



**Midwest ISO**  
We manage power.

**MTEP 06  
Load Deliverability Study  
Results for  
East Region Study Group**

- Sept. 22, 2006

## ○ **Contents**

- **Project Scope**
- **Study Zones & Configuration**
- **Stand-Alone LOLP & Import Limit Results**
  - 2006 & 2011
  - 2011 Limiting Constraints from different Sources
- **Future Steps**



## ○ **Project Scope**

### ■ **Perform the Load Deliverability Study for MTEP06**

- **Verify that MISO LOLP zones meet the 1 day in 10 years reliability criteria for 2006 & 2011**
  - **Find Stand Alone LOLP for Study Zones**
  - **Calculate Study Zones Import Capabilities**
  - **Verify that zones have sufficient imports needed to meet the criteria**



## ○ Study Area Definition

### Internal Areas

MRO-MISO ALTW, GRE, MDU, MPL, NSP, OTP & SMMP  
MRO-Canada Manitoba Hydro(MHSP) & Saskatchewan Power(SASK)  
ATC American Transmission Company (ALTE, WE, WPPI, MGE & WPS)  
SERC-MISO AMRN(CIPS & AUEP), CILCO, CWLP, SPRIL, ILPC & SIPC  
NIPSCO Northern Indiana Public Service Co.  
METC Michigan Electric Transmission Company (CEC, LBWL & WPSC)  
ITC International Transmission Company (DETE)  
FE FirstEnergy Corp.  
CIN Cinergy Services, Inc. (CGE & PSI)  
IP&L Indianapolis Power & Light Co.  
HE Hoosier Energy Rural Electric Coop, Inc.  
SIGE Southern Indiana Gas & Electric Co.  
LG&E Louisville Gas & Electric Co.

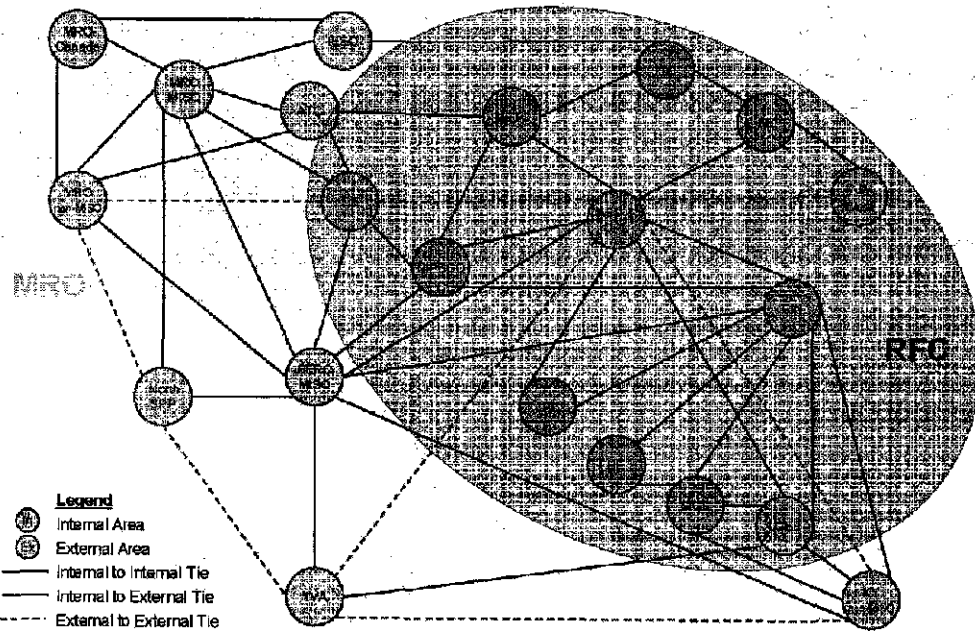
### External Areas

MRO-NonMISO DPC, LES, MIDAM, MPW, NPPD, OPD & WAPA  
COED Commonwealth Edison Co.  
AEP-&DPL American Electric Power, Dayton Power & Light & Ohio Valley Electric Corp.  
NorthSPP-&AECI AECI, EES, KCPL, MIPU & SWPA  
Kentucky-NonMISO Big Rivers Electric Corp.(BREC) & East Kentucky Power Coop, Inc.(EKPC)  
PJM-West Allegheny Energy, Duquesne Light, GPU Corp. WEST & PPL Electric Utilities  
TVA Tennessee Valley Authority  
IESO Independent Electricity System Operator (ONHY)



## ○ Study Configuration

- note: Ties outside study area are not shown





## 2006 & 2011

### ○ Stand-Alone LOLP & Import Limit Results

| MARELI Results |  |                                       | MUST Results          |       |       |
|----------------|--|---------------------------------------|-----------------------|-------|-------|
| Zone           | 2006 - Stand-Alone                                 |                                       | 2006 - Import (MW)    |       |       |
|                | LOLP<br>(days/year)                                | Needed Support (MW)<br>for LOLP = 0.1 | (+ Import) (- Export) |       |       |
|                |  |                                       | Base                  | FCITC | FCTTC |
| NIPSCO         | 18.12  | 1,178                                 |                       |       |       |
| METC           | 0.04   | (277)                                 | -1,284                | 3,184 | 1,900 |
| ITC            | 16.98  | 2,830                                 |                       |       |       |
| FE             | 25.19  | 3,242                                 |                       |       |       |
|                | LOLP > 1 Day in 10 Years<br>(or 0.1 Day in 1 Year) |                                       |                       |       |       |

| MARELI Results |  |                                       | MUST Results                            |       |       |
|----------------|--|---------------------------------------|---|-------|-------|
| Zone           | 2011 - Stand-Alone                                 |                                       | 2011 Contractual Dispatch - Import (MW) |       |       |
|                | LOLP<br>(days/year)                                | Needed Support (MW)<br>for LOLP = 0.1 | (+ Import) (- Export)                   |       |       |
|                |  |                                       | Base                                    | FCITC | FCTTC |
| NIPSCO         | 130.67   | 1,898                                 |   |       |       |
| METC           | 3.15   | 1,435                                 |   |       |       |
| ITC            | 27.99  | 4,092                                 |   |       |       |
| FE             | 46.55  | 4,261                                 |   |       |       |
|                | LOLP > 1 Day in 10 Years<br>(or 0.1 Day in 1 Year) |                                       |   |       |       |



INDY-ILL = Indiana & Illinois {NIPS, CIN, IPL, HE, SIGE CE}



## ○ Future Steps

### ■ Multi-Zone LOLP Analysis

- To find out what a zone's LOLP would be with ties and limited import capability

### ■ Sensitivities

- $\pm 5\%$  load change for 2011
- Increase in generator forced outage rate

### ■ MTEP06 Load Deliverability Report

**UNITED STATES OF AMERICA  
BEFORE THE  
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**AFFIDAVIT OF HISHAM M. CHOUEIKI, Ph.D., P.E.  
ON BEHALF OF  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

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State of Ohio :  
County of Franklin :


I, Hisham M. Choueiki, having been duly sworn, state that:

1. I am employed as a Senior Energy/Telecommunications Specialist in the Policy and Market Analysis Division of the Public Utilities Commission of Ohio.
2. I performed the analysis contained in Attachment B of the accompanying Request for Further Consideration and Analysis.
3. The data with which my analysis was conducted was provided by the FirstEnergy Operating Companies either in filings before this Commission or in response to requests for information from the Staff of the Public Utilities Commission of Ohio.
4. The facts set forth in the accompanying Request for Further Consideration and Analysis, and Opposition to Request for Waiver filed on behalf of the Public Utilities Commission of Ohio are true and correct to the best of my knowledge, information, and belief.

Further affiant sayeth naught.

  
\_\_\_\_\_  
Hisham M. Choueiki, Ph.D., P.E.

Sworn to before me and subscribed in my presence this 14<sup>th</sup> day of March, 2008.

  
\_\_\_\_\_  
Notary Public  
My Commission Expires: THOMAS W. BARNETT  
NOTARY PUBLIC - STATE OF OHIO  
MY COMMISSION NEVER EXPIRES