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### PUCO EXHIBIT FILING

Date of Hearing: 12 2011
Case No. 10-2586-EL-SSO
PUCO Case Caption: Duke Energy-Thio
Volume II
•
List of exhibits being filed:
1EU-Ohio Exs. 1A, 2A, 3A, 4A, 5A,
6A,7,8A,9A and 10A
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Reporter's Signature: Maruh 10: Parlo Jones  Date Submitted: 1/19/2011

Duke Energy Ohio
Case No. 10-2586-EL-SSO
IEU Supplemental First Set Production of Documents
Date Received: November 17, 2010

### IEU-SUPP-POD-03-005 CONFIDENTIAL

### REQUEST:

Please provide any documents identified in response to Interrogatory No. 10.

### **RESPONSE:**

### CONFIDENTIAL PROPRIETARY TRADE SECRET

See Confidential Attachment IEU-Second- Supp-POD-03-005 (1): Transaction Review Committee White Paper - February (Draft)

See Confidential Attachment IEU-Second- Supp-POD-03-005 (m): Market Capacity

See Attachment IEU-Second- Supp-POD-03-005 (n): MISO Report Describing Future Transmission Expansion Projects and Costs;

See Confidential Attachment IEU-Second- Supp-POD-03-005 (o): Analysis of RTO Realignment

- 1. Original Base Case
- 2. Base Case FE STIP
- 3. Base Case FE 2012
- 4. Base Case FE STIP 2012\$
- 5. Base Case FE STIP \$201

See Confidential Attachment IEU-Second- Supp-POD-03-005 (p): Draft of May Whitepaper dated April 30, 2010;

See Confidential Attachment IEU-Second- Supp-POD-03-005 (q): Draft of May Whitepaper dated May 7, 2010;

See Confidential Attachment IEU-Second- Supp-POD-03-005 (r): Draft of Whitepaper Appendix dated January 8, 2010.

PERSON RESPONSIBLE: Lee Barrett

### Transaction Review Committee (TRC) Whitepaper

### **Proposed Transaction Summary**

The TRC is requested to evaluate and approve the transfer of operational control of Duke Energy Ohio's (DEO) transmission assets from the Midwest Independent System Operator (MISO) to the PJM Independent System Operator (PJM) on June 1, 2014 and participate in PJM's 2014/2015 Planning Year (PY) auction to be held in May 2011.

### **Business Case Benefits**

PJM's forward capacity cle	<del>-</del>		ply and demand. DEO's
market area footprint in N	AISO (i.e. all generation a	and load) is <b>a second or the</b>	
Transferring DEO's transm	ission assets, including a	accompanying load and	generation assets, from MISO
to PJM,	that the	the Carry	
	A	s a result, DEO's new ow	erall net generation capacity
	is from	to roughly	thus thus
Under an ESP and the curr	ent generation to load p	profile, DEO custorners a	re
impacted because		will will	
When tran	sferred to PJM. Under t	he Base Case, the propo	sed transfer creates
approximately	in		and a total
contribution to		over a	

### Other strategic benefits include:

- Customer Switching DEO and other Ohio utilities now operate in a very competitive wholesale
  and retail environment and DERS is aggressively targeting those customers. With First Energy's
  (FE) commitment to leave MISO and join PJM, DEO will be the only remaining Ohio utility in
  MISO. Moving to PJM consolidates all Ohio utilities in a single RTO under a single set of
  wholesale and retail market rules for all Ohio suppliers.
- PJM Market Attributes PJM's market design better accommodates customer switching than MISO's design and MISO's market design is focused on vertically-integrated utilities.
- DEO's Joint-Owned Units (JOU) All of DEO's legacy CGE generation would be physically located
  in a single market area with one price signal and fully deliverable to PJM. DEO's JOU's currently
  located in PJM, have limited MISO deliverability for capacity purposes. The joint-owners
  (AEP/DPL) will benefit as well.
- DEO Generation Assets Moving to PJM combines nearly all DEO owned generation capacity (legacy CGE and DENA) into a single RTO market area.

<sup>&</sup>lt;sup>1</sup> If DEO transfers its transmission assets, all load, wholesale customers and generating facilities, attached to the DEO transmission system are to be transferred as well, including Duke Energy Kentucky.

\*\*Transmission system are to be transferred as well, including Duke Energy Kentucky.

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### **Business Case Costs/Risks**

Three major areas were analyzed. First, the impact to the customer is a primary consideration. Second, the regulatory approval process was evaluated and finally, the costs associated with the transaction were identified.

### Customer Impact ...

From an energy perspective, the DEO/DEK-customer is not energy prices are similar in either RTO. From a capacity perspective, for DEO, any impact will be determined by the next deal with Ohio<sup>3</sup>. Under an ESP-like deal, customers are hedged against market prices for capacity. Under an EE-like auction deal, all customers pay a market price for capacity—that may or may not be higher than MISO. DEK customer impacts are

### Regulatory Approvals &

All three Midwest State Commissions, in particular OH and KY, will want to understand the impact of the costs and benefits and may seek assurances that customers are not negatively impacted. PUCO and the KY PSC may see some benefit from having all RTO utilities in a single RTO and FE's proceeding currently before PUCO may provide a guide to additional financial risks as DEO moves forward. The JURC will protest the move and requiest that its customers be held harmless. Finally, FERC approval will be required for DEO to leave MISO and join PJM. Similar approval was recently granted to FE.

While MISO approval is not required, Midwest transmission has a positive and influential relationship with MISO which could be impaired by partial transfer of its system. In PJM, Midwest transmission will be a smaller participant and will have less influence than it currently has in MISO.

One-time upgrades for existing customers and legal costs and one-time cost to cover DEO/DEK's portion of MISO's transmission expansion obligation. The analysis

DEO current has a 3 year Electric Security Plan (ESP) expiring on 12/31/11. Upon expiration, DEO with PUCO approval could enter into a new ESP, a Market Rate Option or some hybrid, similar to FE.

m is the amount to be paid out in 2014 when DEO exits MISO, but is recognized on the balance sheet two years prior to the exit. Therefore, the state has been adjusted to

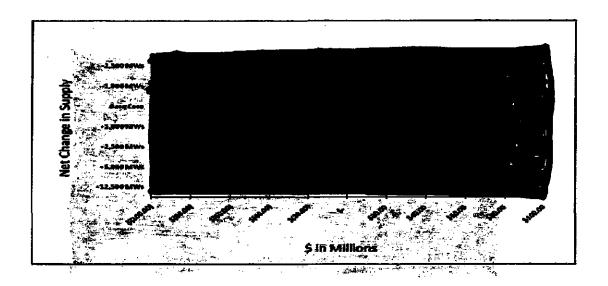
For projects ultimately approved from 2010 through 2014 the costs may exceed or be less than

While currently lower, MISO's expansion costs are expected to approach PJM's expansion costs in future years.

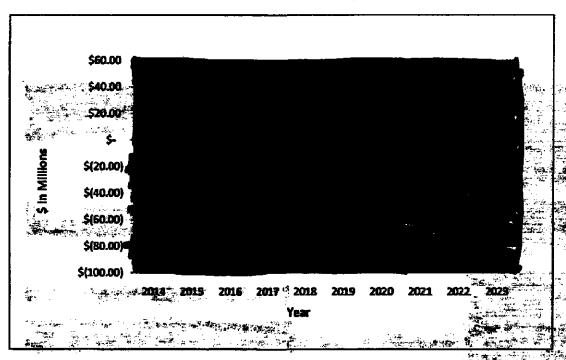
to much count to more to		
Annual cost impact is	including	
reduced	and	
DEC Valuation Analysis (see For	otnote 2)	
Under the Base Case, approxim	nately	
achieved for the		including
	from MISO to PIM. The total	are
approximately ov	er the Sensitivities Sensitivities	3
to the existing	to the Base Case are	included. For example, if an
	from PJM the value	
	and Conversely, if	is
o the market the	and	
Costs are detailed below as we	il.	
The Base Case assumes		ifically, the
The pase case assumes	and the	The Base
Case assumes		monitoring FE's proceeding
	it will seek recovery of all these FERC costs, in	- •
	enying such recovery. PUCO has suggested to	
	e FERC costs, including the difference in MISO	• •
	three years. The PUCO's FE proceeding may	<del>-</del>
	ed, however, the matter may not be resolved	
=	to move to PJM, then DEO can expect to	
	h, DEO's recovery of	Puld
	action. Similarly, if DEO is required to provide	
beyond what has been	the value of the transaction	
*** **** ****	A 1399	
NPV - Ten y		a celler - T
	ear After Tax Discounted Cash Flow (2014 \$ )	II MINIOLE
	ear After Tax Discounted Cash Flow (2014 5.)	
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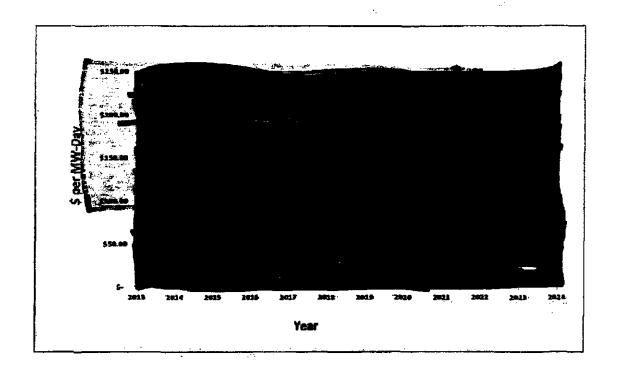
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NPV - Annual After Tax Discounted Cash Flow (2014 \$ in Millions)



**Projected RPM Revenues** 



Cost Assumptions (2012 \$)

One Time Costs		
	One time Exit Fee	
1	EMS Upgrades	<b>k</b>
	Outside Counsel *	
	MISO Trans. Expansion Costs	
- ,		(2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
ncremental Costs	in the second of	
	Midwest Transmission	11 new FTE's
•	Midwest Transmission	
	Madison Station	Transmission from PJM to MISO for DEI
	Midwest Transmission	
Note: See faceriote 2—The	incremental aftendar discreptual	cash flow includes all these costs but does not include any

Note: See Footifote 2 — The incremental after-tex discounted cash flow includes all these costs but does not include an incremental benefit realized by DEX.

Duke Energy Ohio

Gase No. 10-2586-EL-SSO

IEU Supplemental First Set Production of Documents

Date Received: November 17, 2010

### IEU-SECOND-SUPP-POD-01-005 CONFIDENTIAL

### REQUEST:

Please provide any documents identified in response to Interrogatory No. 10.

### RESPONSE:

### CONFIDENTIAL PROPRIETARY-TRADE SECRET

See Confidential Attachment IEU-Second-Supp POD-01-005 (a): Whitepaper Memo to executive management requesting RTO Realignment Approval;

See Confidential Attachment (EU-Second SUPP-POD-01-005(b): Appendix to Whitepaper – background document;

See Confidential Attachment IEU Second-Supp-POD-01-005(c): Key Assumptions Document presented to executive management;

See Confidential Attachment IEU-Second-Supp-POD-01-005(d): Power Point Presentation to executive management summarizing RTO alignment.

PERSON RESPONSIBLE: Lee Barrett

Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(a) Attachment Page 1 of 3



### Draft Transaction Review Committee (TRC) Whitepaper - Redacted -5/7/10

### **Proposed Transaction Summary**

The TRC is requested to evaluate and approve the transfer of operational control of Duke Energy Ohio's (DEO) transmission assets from the Midwest Independent System Operator (MISO) to the PJM Independent System Operator (PJM) on June 1, 2012 and participate in PJM's 2014/2015 Planning Year (PY) auction to be held in May 2011<sup>1</sup>. DEO will also hold transitional auctions for PY 2012/2013 and 2013/2014 for PJM auctions that have already cleared.

### **Business Case Benefits**

PJM's forward	capacity clearing mai	rket is based on 1	the intersection of sup	ply and demand. D	ECTS
market area fo	otprint in MISO (i.e. a	If generation an	d load) is <b>a second</b>		
Transferring Di	EO's transmission ass	ets, including ac	companying load and	generation assets, f	rom MISO
to PJM, create:		that The	the		
		As a	result, DEO's		
	is the second	from T	to roughly	thus	
Under an ESP a	and the current gener	ation to load pro	offle, DEO customers a	re	
beca	use		will		
	when transferred to	PJM. Under the	Base Case, the propo	sed transfer create:	\$
approximately	in			and a total co	ntribution
to		over a			

### Other strategic benefits include:

- Customer Switching DEO and other Ohio utilities now operate in a very competitive wholesale
  and retail environment and DERS is aggressively targeting those customers. With First Energy's
  (FE) commitment to leave MISO and join PJM, DEO will be the only remaining Ohio utility in
  MISO. Moving to PJM consolidates all Ohio utilities in a single RTO under a single set of
  wholesale and retail market rules for all Ohio suppliers.
- PJM Market Attributes PJM's market design better accommodates customer switching than MISO's design and MISO's market design is focused on vertically-integrated utilities.
- DEO's Joint-Owned Units (JOU) All of DEO's legacy CGE generation would be physically located
  in a single market area with one price signal and fully deliverable to PJM. DEO's JOU's currently
  located in PJM, have limited MISO deliverability for capacity purposes. The joint-owners
  (AEP/DPL) will benefit as well.

<sup>&</sup>lt;sup>2</sup> If DEO transfers its transmission assets, all load, wholesale customers and generating facilities, attached to the DEO transmission system are to be transferred as well, including Duke Energy Kentucky.

for both DEO (85%) and DEK (15%).

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### Confidential and Privileged Prepared at Request of Counsel

 DEO Generation Assets – Moving to PJM combines nearly all DEO owned generation capacity (legacy CGE and DENA) into a single RTO market area.

### **Business Case Costs/Risks**

Three major areas were analyzed. First, the impact to the customer is a primary consideration. Second, the regulatory approval process was evaluated and finally, the costs associated with the transaction were identified.

### **Customer Impact**

From an energy perspective, the DEO/DEK customer is energy prices are similar in either RTO. From a capacity perspective, for DEO, any impact will be determined by the next deal with Ohio<sup>4</sup>. Under an ESP-like deal, customers are hedged against market prices for capacity. Under an FE-like auction deal, all customers pay a market price for capacity — that may or may not be higher than MISO. DEK customer impacts are neutral to positive from a transfer. Finally, DEI customer impacts are

### Regulatory Approvals

All three Midwest State Commissions, in particular OH and KY, will want to understand the impact of the costs and benefits and may seek assurances that customers are not negatively impacted. PUCO and the KY PSC may see some benefit from having all RTO utilities in a single RTO and FE's proceeding currently before PUCO may provide a guide to additional financial risks as DEO moves forward. The IURC will protest the move and request that its customers be held harmless. Finally, FERC approval will be required for DEO to leave MiSO and join PJM. Similar approval was recently granted to FE.

While MISO approval is not required, Midwest transmission has a positive and influential relationship with MISO which could be impaired by partial transfer of its system. In PJM, Midwest transmission will be a smaller participant and will have less influence than it currently has in MISO.

One-time (	These costs include: a MISO Exit Fee (1997), EMS upgrades (1997) and legal costs (1997) In addition, for the
	and (Market)
Annual cost impact is	including incremental Midwest transmission personnel

<sup>&</sup>lt;sup>4</sup> DEO current has a 3 year Electric Security Plan (ESP) expiring on 12/31/11. Upon expiration, DEO with PUCO approval could enter into a new ESP, a Market Rate Option or some hybrid, similar to FE.

Case No. 10-2586-EL-SSO IEU-SUPP-POD-01-005(a) Attachment Page 3 of 3

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### Cost Assumptions (2012 \$)

One Time Costs		
	One time Exit Fee	
	EMS Upgrades	
	Outside Counsel	
Year 1-5 Costs		
9-	PJM Expansion Costs	
Incremental Costs		
	Midwest Transmission	11 new FTE's
	Midwest Transmission	
	Madison Station	Transmission from PIM to MISO for DEI
	Midwest Transmission	
•	· · · · · · · · · · · · · · · · · · ·	

Note: See Footnote 2 - The process of incremental after-tex discounted cash flow includes all these costs but does not include any incremental benefit realized by DEK.

Duke Energy Ohio
Case No. 10-2586-EL-SSO
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### IEU-SECOND-SUPP-POD-01-005 CÓNFIDENTIAL

### REQUEST:

Please provide any documents identified in response to Interrogatory No. 10.

### **RESPONSE:**

### CONFIDENTIAL PROPRIETARY TRADE SECRET

See Confidential Attachment IEU-Second-Supp-POD-01-005 (a): Whitepaper Memo to executive management requesting RTO Realignment Approval;

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See Confidential Attachment IEU-Second-Supp-POD-01-005(d): Power Point Presentation to executive management suppressing RTO alignment.

PERSON RESPONSIBLE: Lee Barrett

Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(b) Attachment \*\*Page 1 of 7

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Transaction Review Committee (TRC) Whitepaper—Redacted Appendix

### Background

DEO owns roughly 4,100 MW (ICAP) or market area peak load of 4,700 MW. DEO's base-load coal generation fleet consists of jointly-owned units (JOU) with either Dayton Power & Light (DPL) and/or American Electric Power (AEP)? The JOU's operated by DPL or AEP physically reside in the PJM market area, while the JOU's operated by DEO reside in the MISO market area. Through joint-owned transmission, the JOU's are pseudo-tied back to their respective owner's market area. For example, DEO's share of the Zimmer station receives a MISO dispatch signal while AEP and DPL's share receive a PJM dispatch signal. DEO also owns 3,100 MW (ICAP) or market area.

The MISO operates a day-ahead and real-time energy and ancillary service market based on a security constrained economic dispatch. Since June 2005, the MISO has implemented a new capacity resource adequacy requirement that is based on month-ahead market participant compliance with financial penalties for non-compliance. It is primarily a bi-lateral capacity market, but the MISO also administers a voluntary capacity auction prior to the compliance determination. MISO is reluctant to move to more structured capacity market design.

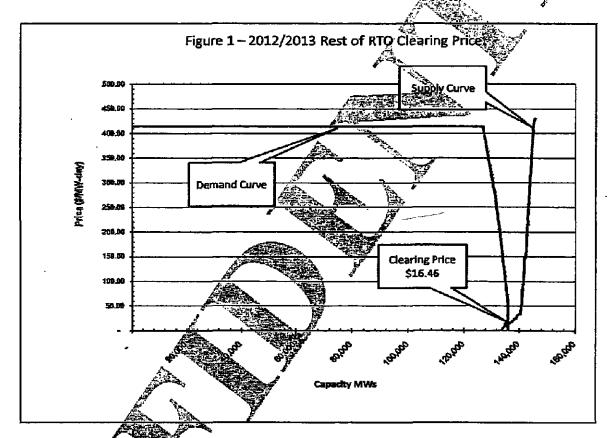
PJM also operates a day-ahead and real-time energy market based on a security constrained economic dispatch. PJM's ancillary service market is cleared separately. Since 2006, PJM has operated a structured capacity market whereby PJM procures capacity three years forward to satisfy reliability requirements on a locational or zonal basis. PJM's capacity market is called the Reliability Pricing Model (RPM). Participation in RPM is mandatory for existing generation owners and voluntary for external generation, demand response and planned (i.e. generation, demand, energy efficiency, transmission) resources. However, a self-scheduling option known as the Fixed Resource Requirement (FRR) also exists.

RPM, while referred to as a capacity market, essentially provides an administratively determined price based on the intersection of the locational or zonal supply and demand curve. The shape or slope of the demand curve is determined by the Cost of New Entry (CONE) and the targeted reliability requirement. The supply curve is based on generation offers made by market participants that reflect go-forward operating costs and approved by the Market Monitor. The DEO generation currently in PJM receives Rest of RTO pricing of the unconstrained zonal price, given its location. Primary drivers that impact price include; new generation, new demand response and energy efficiency, imports/exports, retirements and load growth. Because of the steepness of the supply and demand curves, small changes in these categories have large impacts on prices. Figure 1 is a graph of the most recent RPM clearing price for

Case No. 10-2586-EL-SSO
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the Rest of RTO zone in PJM. Finally, since RPM looks forward three years, PJM has conducted auctions for as far out as PY 2012/2013. A Planning Year is a June 1 to May 31 annual terms



### Why Revisit the RTO Choice?

First Energy (FE) Announcement—On August 17, 2009 FE filed its application at FERC to leave MISO and join PJM on June 1, 2011. FE stated that it is not aware of any approvals required by the State of Ohio. FE also stated that PJM it at better fit" given its corporate and regulatory structure in Ohio. Among the benefits, FE cited greater electrical interconnectivity with PJM than MISO, reduced congestion and production costs and a capacity market structure that promotes long-term contracting, retail switching, identified the promotes and energy efficiency. FE also stated that its auction structure and increased retail competition supports a PJM market design over MISO's, which is geared toward vertically integrated utilities. On December 17, 2009 FE received approval from FERC to leave MISO and join PJM.

Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(b) Attachment

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FE will participate in PJM's May 2010 RPM auction for PY 2013/2014. Based on discussions with FE and filed materials, FE will need to procure about 1,000 MW of capacity from PJM in excess of its load requirement.

Legacy Issues — A transfer to PJM will combine nearly all DEO generation (CGE and DENA) into a single market area. A transfer to PJM will also align the JOU's into a single market area and provides for a consistent dispatch signal. Under MISO's market design, the non-DEO operated JOU's are treated as "local" capacity resources and any excess DEO capacity cannot be sold to the broader MISO market. In PJM, these units will be treated as "network" resources and available to participate in the PJM's capacity auction.

Customer Switching – Competition at both the wholesale and retail levels is now an active part of Ohio's electricity market (i.e. DEO 40%, FE 50% and DPL 15% - switching rate). DEO has experienced significant retail switching away from it as a Provider of Last Resort. Duke Energy Retail Sales (DERS), is aggressively targeting wholesale and retail customers across all Ohlo utilities, including those in DEO. PJM's market design better accommodates customers thouse States.

PJM v. MISO Market Attributes — PJM's market design contains elements that better accommodate retail switching. First, PJM has a three year forward annual capacity auction (i.e. RPM) versus MISO's month ahead capacity compliance requirement. The forward looking capacity auction provides price signals for the retention of existing capacity and pricessignals for new capacity construction. RPM also provides transparent capacity pricing for all competitive suppliers and reduces any capacity risk premium that may be added because the price is known in advance. RPM eliminates any potential boom or bust pricing that is associated with MISO's month ahead design. RPM also enforces PJM's capacity obligation and supports the daily transfer of a customer's obligation from one supplier to another. Finally, PJM's Auction Revenue Right (ARR) allocation process for retail switching is more robust than MISO's.

### Cost and Benefit Impact Analysis

_	
PJM/MJ50 M	larket Area Benefits PIM conducted a production model simulation with DEO/DEK in PIM
versus DEO/I	DEK-in-MISO. This was a similar analysis to the one PJM conducted for FE. Using 2008/2009
test year, PJN	Midentified and the second of
for a	that accrues to the combined PJM/MISO market areas.
While.	the the given the size of both markets.
Benefit to DE	O - Assets owned by DEO will provide from a move to PJM from MISO because of PJM's
្ត capacity mai៉ា	ket structure. If DEO's transmission assets are placed under the control of PJM, DEO's
overall	is from the office to
iroughly	of See Valuation Analysis below for shareholder benefits.

Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(b) Attachment \!\text{\text{Page 4 of 7}}

### Confidential and Privileged Prepared at Request of Counsel

Other benefits to DEO are similar to those raised by FE. First, DEO's transmission system is highly integrated with PJM members AEP and DPL, not even considering the JOUs. DEO has 12 interconnections with PJM versus 1 with MISO if it were to move. Second, participating in PJM will align all the JOUs in a single market where capital and O&M decisions are based on a single dispatch and market structure. Third, all Ohio retail suppliers will be in the same market and subject to the same rules for all Ohio load. Fourth, PJM's market structure is better suited for retail competition States. Finally, retail choice customers should have more options based on PJM's market design, thereby reducing supplier risk premiums.

DEO Customer Impact — For energy, historical locational marginal prices (LMPs) at the JOUs were analyzed from April 2005 through August 2009. On average, PJM-LMPs were \$0.50 lower than MISO LMPs on an average LMP of \$43 MWh. From January 2008 through August 2009 PJM's LMPs were greater by \$0.88 on an average LMP of \$42 MWh. The internal analysis concluded that the LMP's in both markets are essentially the same — PJM conducted a production model simulation that identified a local local local costs or put of an approximate Again, there is no material impact and this amount is within any forecast error band associated with any of the inputs.

For capacity, historically PJM's RPM auction model has cleared higher than MISO's bilateral capacity market. However, for Planning (ear 2012/2013 MISO's bilateral market is trading higher (\$33 MW-day) over PJM's cleared RPM auction (\$16 MW-day). Ultimately, DEO's regulatory deal with Ohio will determine whether customers paya PJM market price for capacity – that may be higher or lower than MISO – or the standard service offer rate that includes a contribution towards capacity. Under an Electric Security Plan (ESP)-like deal, existing generation (legacy CGE or all DEO owned generation) in PJM will provide a hedge to ESP customers. Incremental capacity needs, if any, would be handled in a similar manner to the System Reliability Tracker (SRT). Under an FE-like auction structure, all customers in DEO's load zone will pay the same market price for capacity.

Benefit to DEK – Assets owned by DEK are [redacted] from a move to PJM from MISO because of PJM's forward capacity market structure and expected [redacted] capacity and energy market prices as compared to MISO. DEK latest integrated Resource Planning projections of load and capacity show DEK being [redacted] all years through 2023 and given the expected [redacted] value of capacity in the PJM market as compared to MISO there is a projected total incremental capacity [redacted] over the 10 year study period taking into account DEK's projected share (15%) of one-time costs.

Likewise, given [redacted] expected energy prices in PJM than MISO there is an [redacted] for DEK generation to be dispatched in the PJM energy market to produce [redacted] MWHs at [redacted] LMPs resulting in total [redacted] over the 10 year study period.

Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(b) Attachment

### Confidential and Privileged Prepared at Request of Counsel

DEK Customer Impact — Estimated energy and capacity [redacted] shown in the previous section would be [redacted]. As with DEO results, the estimated marginal difference between PJM and MISO as compared to overall DEK market revenues and within the range of uncertainty of the input assumptions.

For the energy analysis, historical LMPs were compared at East Bend, CIN.HUB, and AD HUB to establish the locational basis differential between the DEK zone and the MISO and PJM energy markets. This locational basis differential showed projected [redacted] energy prices in the PJM market as compared to MISO.

For capacity, actual historical MISO bilateral trade prices were escalated based on ICF consultant projections and compared to PJM RPM projections projections projections

Impact to DEI – The impacts to DEI discussed in this section refer to the impact on DEI of DEO/DEK moving to PJM. The scenario of DEI itself moving to PJM was evaluated and dismissed for many reasons including the following considered most significant:

- [redacted]

DEI customers may be provided to the DEO/DEK withdrawal if the but for the identified below. However, with DEO/DEK's transfer, MISO's administrative costs will be recovered from a smaller number of MISO members, DEI included. PJM estimated these to to decide the costs is the addition of MidAmerican Energy, Muscaline, Dairyland (June 1, 2010) and Cedar Falls to the MISO. In addition, since DEO is a from the MISO market, could be expected to the extent DEI has fixture capacity needs.

### Stakeholder Considerations

Internal (Midwest Transmission) – From a Midwest transmission perspective, no show stoppers have been identified. With this in mind, the following considerations are provided.

Unlike FE which is consolidating its transmission operations into a single market area, DEO's potential move to PJM, will require operation in two separate market areas and under two different reliability coordinators. Some level of inefficiencies will be created. One-time Energy Management System (EMS) thanges are estimated at market and potentially 11 new FTE's market will be required to



Case No. 10-2586-EL-SSO IEU-Second-SUPP-POD-01-005(b) Attachment S: Page 6 of 7

### Confidential and Privileged Prepared at Request of Counsel support operations in two markets. In addition, the current transmission rates will need to be converted from MISO's methodology to PJM's which will require re-filing the rates at FERC. This could trigger interventions and possible protests to Duke's rates (ROE) even if Duke is in transmission revenue is attributed to a existing rates - a Midwest Transmission revenue will be impacted by a transfer to PJM. Currently; DEO's retail customers pay an average Midwest Transmission rate of \$1.61 kW/month (DEO/DEK/DE) average). When DEO joins PJM it will charge a rate calculated on a stand-alone basis, which is cufrently kW/month which will transmission was by approximately transmission will not be affected until the time of the next rate case for DEK at which time the transmission rate will the blended rate of DEO/DEK. ith MISO. The relationship between PIM and its Midwest transmission has a that exists between MISO and its transmission transmission owners is in PIM than MISO. In addition, transferring owners. Midwest transmission will have for DELin MISO, depending upon how the DED/DEK assets to PJM could create a transfer is executed. Exercising an owner's right to leave based on a business need Internal (Duke Energy Indiana) – Dats Madison peaking station, which is interconnected to the DEO transmission system, would move to PJM with the integration of DEO into PJM. Given the in DEI, it is imperative that and maintain 190% eligibility as a Planning Resource Credit (PRC) for the monthly MISO capacity obligation. This will be resolved by pseudo-tying the station back to MISO. Internal (Other Costs) - Tausmission owners leaving MISO are required to pay an "exit fee" based on MISO incurred long-term obligations. DEO/DEK's estimated exit fee is which 1 DEO/DEK is also subject to their share of MISO Transmission Expansion Plan (MIEP) obligations: bese obligations are currently estimated at and since DEO will PIM's Transmission Expansion costs (RTEP), the MISO costs are The last potential costs are parties who feel they have been by a DEO/DEK move and may protest the transfer. These entities include l A one-time cost of allocated to cover

External (PUCO) — Benefits to PUCO may include having all Ohio utilities in a single RTO and an RTO that better promotes retail competition. In addition, PUCO will now only have to monitor one set of RTO

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rules rather than two. However, PUCO will want to see the impact of potential costs and benefits PUCO has filed a protest regarding FE's transfer and initiated a state investigation.

External (KY PSC) – Benefits to KY PSC may include having its RTO utilities (i.e. DEK, AEP) as members of a single RTO rather than two. The KY PSC could see benefits in the reduction of consumer charges if [redacted] excess capacity [redacted] are credited back to customers as per the profit sharing mechanism in the present DEK rate settlement.

External (IURC) – Because MISO is located in Indiana, it has generally been supported by the IURC and other Indiana Stakeholders. The IURC and to Duke withdrawing support for MISO in favor of PJM. However, the IURC and other Indiana stakeholders are Regardless, the IURC is protesting FE's transfer and

### Regulatory Approvals

FERC – Approval is required to leave the MISO and join PJM. FERC approval will be needed not just prior to joining PJM, but is required to participate in PJM RPM auction (May 2011 for PY 2014/15 auction).

PUCO — Approval to leave MISO and join PJM is not explicitly required. DEO should assert PUCO only requires DEO to join an RTO. However, approval to recover any regulatory assets (i.e. MISO MTEP costs, exit fee) will be required as well as PJM administrative costs. Additionally, as seen in the FE case, PUCO will likely open a state proceeding on its own motion to evaluate the impacts of the RTO change. PUCO may want assurances that customers will not be negatively impacted. FE's proceeding currently before PUCO will provide a guide as to the potential financial risks.

KY PSC – DEK should assert there is no jurisdiction and request the PSC find there is no jurisdiction. If however, the PSC asserts jurisdiction, DEK must prove benefits outweigh detriments of withdrawing via a cost benefit analysis of at least commit to hold customers harmless from the transaction for some period. If DEK can demonstrate PJM is more beneficial, PSC may allow recovery of exit fees. However, fees will be netted against any MISO revenues already embedded in base rates. Costs may be deferred until sorted out in a rate case. DEK will have burden of proof to demonstrate recovery amounts and prudence.

IURC – Approval not required. Anticipate IURC will intervene at FERC and request DEI customers are held:harmless.



Duke Energy Ohio
Case No. 10-2586-EL-SSO
IEU Supplemental First Set Production of Documents
Date Received: November 17, 2010

### IEU-SECOND-SUPP-POD-01-005 CÓNFIDENTIAL

### REQUEST:

Please provide any documents identified in response to Interrogatory No. 10.

### RESPONSE:

### CONFIDENTIAL PROPRIETARY TRADE SECRET

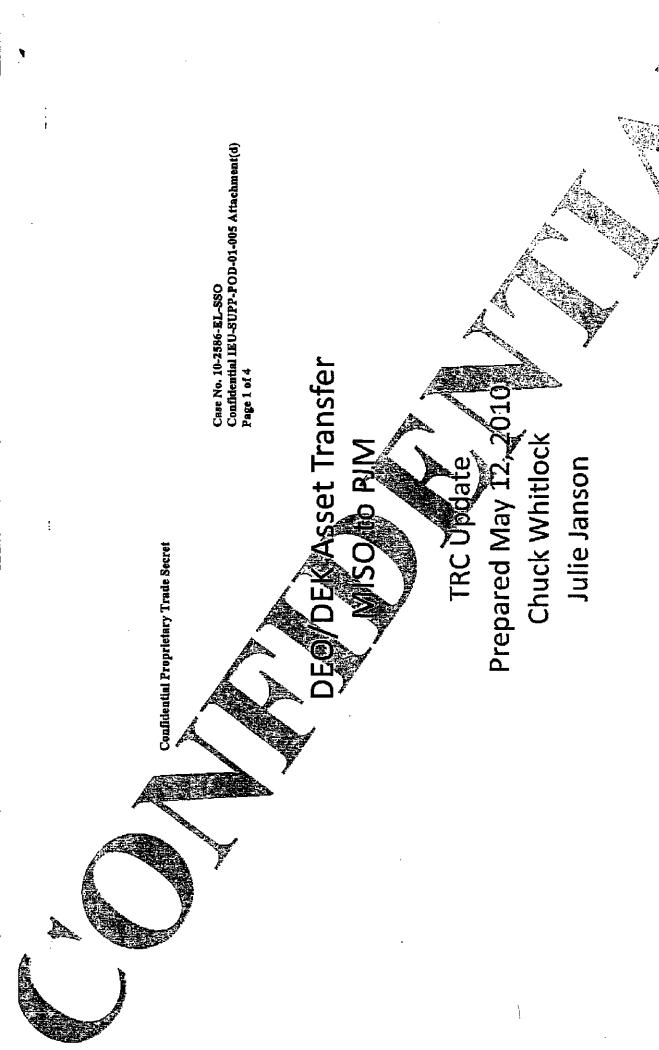
See Confidential Attachment IEU-Second-Supp 20D-01-005 (a): Whitepaper Memo to executive management requesting RTO Realignment Approval;

See Confidential Attachment IEU-Second SUPP POD-01-005(b): Appendix to Whitepaper – background document;

See Confidential Attachment IEU Second-Supp-POD-01-005(c): Key Assumptions Document presented to executive management;

See Confidential Attachment IEU-Second-Supp-POD-01-005(d): Power Point Presentation to executive management spinmarizing RTO alignment.

PERSON RESPONSIBLE: Lee Barrett



Confidential Proprietary Trade Secret

Confidential IEU-SUPP-POD-01-005 Attachment(d) Case No. 10-2586-EL-SSO Page 2 of 4

## DEO/DEK Transfer from MISO to PJM

- Approve transfer of DEO/DEX from MISO to PJM effective June 1, 2012 TRC previously approved transfer effective June 1, 2014
- and June 1, 2014 transfer jesültedili
- Incremental net value associated with
- What has changed?
- becomes FE Stipulation with PUCO (MTEP recovery
- egacy coal assets and annual y revenues fold Impact of Discounting, incremental capacit becomes

However, such value

June 1, 2012 transfer results in

should be reflected in





Confidential Proprietary Trade Secret

Case No. 10-2586-EL-SSO Confidential IEU-SUPP-POD-01-005 Attachment(d) Page 3 of 4

# DEO/DEK Transfer from MISO to PJM

### Why Accelerate the Date?

assets in শ্রীM। Provides

to legacy coal

capacity market - MISO has month ahead compliance PJM has a str

Assumes DEO is in an addition format after current ESP

Reduced Regulatory Risk

Transferring sooner rather than latering duces.

MISO transmission expansion rate applied to general first that may be

Hold harmless costs if

e cost allocation FE has a pending settlement in its Ohio ESR that may i

FERC has issues its order on FE's RTO alignment and cost all

FE transitional auctions cleared consistent With ex

\$108 PY 2011/2012, \$20 PY 2012/2013

DEO will hold transitional auctions for PY 2012/2013 and PY 201



Confidential Proprietary Trade Secret

Case No. 10-2586-EL-SSO Confidential IEU-SUPP-POD-01-005 Attachment(d) Page 4 of 4

## DEO/DEK Transfer from MISO to PJM

### What Else is Impacted?

II

- summer 2010 for participation in PY 14/15 base auction FERC filling date

Point of no teturn still the same \_ Jan/Feb 2011

Ohio

months - 12/31/11 to 6/1/12? Should the current ESP

Extension of current rates

Earnings test impact?

- Should an auction be held for the Simonth ellog?

- Potentially accelerates the timing of the lext BSP discussion

Assumes auction is the result

DEO to hold transitional auctions for PJM capacity for PY

Assumes auctions in Q1 2011 - could be later but base aucti

DEO will likely hold SSO auctions for next ESP period — J

Assumes auctions in mid to late 2011 but after transitional and base a

Kentucky

No changes.

Duke Energy Ohio
Case No. 10-2586-EL-SSO
IEU Supplemental First Set Production of Documents
Data Received: November 17, 2010

### IEU-SECOND-SUPP-POD-01-005 CONFIDENTIAL

### REQUEST:

Please provide any documents identified in response to Interrogatory No. 10.

### RESPONSE:

### CONFIDENTIAL PROPRIETARY TRADE SECRET

See Confidential Attachment IEU-Second-Supp POD-01-005 (a): Whitepaper Memo to executive management requesting RTO Realignment Approval;

See Confidential Attachment IEU-Second SUPP-POD-01-005(b): Appendix to Whitepaper – background document;

See Confidential Attachment IEU Second-Supp-POD-01-005(c): Key Assumptions Document presented to executive management;

See Confidential Attachment IEU-Second-Supp-POD-01-005(d): Power Point Presentation to executive management summarizing RTO alignment.

PERSON RESPONSIBLE: Lee Barrett

### [Type the document title]

### CONFIDENTIAL PROPRIETARY TRADE SECRET

Case No. 10-2586-EL-SSO
Confidential IEU-Second-SUPP-POD-01-005Attachment(c)
Page 1 of 1

### DE Ohio Asset Transition from MISO to PJM

### **Modeling Assumptions**

- The financial projections are based on the capacity forecast in PJM; this does not include the impact of the language of the capacity for other entrants/exits to the market.
- o Continuing degradation of load or an increase in energy efficiency demand reduction strategies could impact the economics.
- o Key sensitivities relate to capacity assumptions over 10 years. These sensitivities are reflected in the whitepaper; however, material capacity supply (build) over and above the assumptions in this analysis could negatively impact the outcome.

### **Cost Assumptions**

- o MISO transmission expansion plan (MTEP) costs of equilibrium food increase if new MISO-related projects are approved prior to the DEO move to PJM. There is also the possibility that projects already approved are cancelled, potentially decreasing costs. MTEP costs may be recoverable but the analysis conservatively does not assume that they are recoverable.
- o costs to costs could be above the amounts assumed; what leverage do we have to hold these
- o NPV analysis is in 2104 dollars; the NPV in 2010 dollars is

### Regulatory/Political Risk

- o The Indiana Utility Regulatory Commission (IURE) reaction to this transaction with impacts to future requests from Duke because (1) MISO is located in Indiana and has been supported by the IURC and, (2) they are protesting in Energy's transfer so a precedent has been set. The amount and impact of the IURCs potential reaction is unknown.
- o Relationship with MISÖ.

### Accounting

o The MISO exit fee of the and the MISO transmission expansion fee of the will likely be recorded in C12011 when Duke signs an agreement with PJM. This agreement would include information needed to participate in the May 2011 auction that will formally obligate Duke to transfer the Ohiotransmission assets to PJM.

### Approval

o Consideration should be given to revisiting the project status and economics once the regulatory process scompleted and prior to commitment to the transaction in 2011.



THU TUNTER LON

Duke Energy Ohio Case No. 10-2586 EL-SSO IEU Supplemental First Set Production of Documents Date Received: November 17-2010

IEU-SUPP-POD-01-005 CONFIDENTIAL

### REQUEST:

Please provide any documents identified in response to interrogatory No. 10.

### RESPONSE:

Objection. This request seeks information protected under the doctrines of attorney client privilege and attorney work product as well as information that is proprietary and trade secret. Without waiving said objection, please seems following

### CONFIDENTIAL PRORPRIEFARY TRADE SECRET

Attachment IEU-SUPP POD-01-005(a): White paper Memo to executive management requesting RTO Realignment Approval Reducted for Attorney Work Product/ Attorney Client Privilege.

Attachment IEU-SUEP-ROD-01-005(b): Appendix to Whitepaper- background document-Redacted for attorney Work Product/Attorney Client Privilege

Attachment IEUSURPPOD-01-005(c): Key Assumptions Document presented to executive management Reducted for Attorney Work Product/ Attorney Client Privilege

Attachment IEU-SUPP-POD-01-005(d): Power Point Presentation to executive management summarizing RTO realignment. Redacted for Attorney Work Product/

Attachment IEU-SUPP-POD-01-005 (e): PJM's Analysis of RTO Congestion

Attachment IEU-SUPP-POD-01-005 (f): RPM Sensitivity Analysis

Attachment IEU-SUPP-POD-01-005(g): Base Case W2012 Discount Whitepaper Support

Attachment IEU-SUPP-POD-01-005(h): Base Case W2012 Discount Whitepaper Support

Attachment IEU-SUPP-POD-01-005(i): Historical LMP Data

Attachment IEU-SUPP-POD-01-005 (j): Wood Mackenzie Duke Fundamentals 2009

Attachment IEU-SUPP-POD-01-005 (k): Email

See Also Attachment I to OCC-INT-02-010 CONFIDENTIAL

PERSON RESPONSIBLE: Charles R. Whitlock

### Case No. 10-2586-EL-SSO Confidential IEU-SUPP-POD-01-005 (k) attachment CONFIDENTIAL PROPRIETA EN ADE SECRET

### Barrett, Lee E

From:

Council, Donna T

Sent:

Tuesday, May 18, 2010 9:03 AM Barrett, Lee E; Whitlock, Chuck

To: Subject:

Fw. Electronic Approval Requested - DE Ohio Transmission Asset transfer to PJM.

From: Rogers, Jim To: Council, Donna T

Cc: Currence, Kathy K; Trent, Keith Sent: Tue May 18 08:52:49 2010

Subject: RE: Electronic Approval Requested - DE Ohio Transmission Asset transfer to PIM

l approve.

From: Council, Donna T

Sent: Monday, May 17, 2010 9:48 AM

To: Rogers, Jim Cc: Currence, Kathy K

Subject: Electronic Approval Requested - DE Ohio Transmission Asset transfer to PJM

Jim: Last week the TRC approved the transition of the Duke EpocyChio transmission assets from MISO to PJM, effective January 1, 2012. The proposal to move these assets to WM as originally presented and approved in February 2010 for a June 1, 2014 effective date. As a quick summary, additional information has become available since the initial approval

incorporates intelligence received from the results of the Figure ray a diction on

Attached are the documents reviewed by the RG reconjunction with this transaction. The presentation reflects June 1, 2012 date; however in the TRC meeting the recommendation was made to move the participation date back to January 1, 2012 to align with the expiration of the ESP and obtain acceptance mental capacity revenues for that 5-month period.

Please respond with your electronic yote at your earliest convenience.

Thanks, Donna





JULIE S. JANSON President

Dake Energy Ohio, Inc. Dake Energy Kentucky, Inc. 139 E. Fourth Street / EA503 Cincinneti, ON 45202

513-419-5757 513-419-5842 fex julie.jenson@duke-energy.com

May 20, 2010

Mr. John Bear President and Chief Executive Officer Midwest Independent Transmission System Operator, Inc. 720 Center City Drive Carmel, Indiana 46032-2866

RE: Notice of Withdrawal of Duke Energy Ohlo, Inc. and Duke Energy Kentucky, Inc.

Dear Mr. Bear.

Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc. (the "Companies") notify you of their intent to withdraw their transmission facilities from the Midwest ISO effective 11:59 p.m. December 31, 2011. This notice is provided under Article Five, Section I of the Agreement of the Transmission Facilities Owners to Organize the Midwest Independent Transmission System Operator, Inc. (the "Transmission Owners Agreement").

The Companies intend to integrate into PJM interconnection, L.L.C. effective January 1, 2012. We request that you post this notice on the Midwest ISO OASIS and the Midwest ISO website to ensure that transmission customers are aware of it.

Representatives of the Companies will contact your staff shortly regarding discussions required by various provisions of the Transmission Owners Agreement. In the meantime, please feel free to contact Jim Gainer, Vice President, Federal Regulatory Policy, Duke Energy Corporation, at 704-382-5618 with any questions.

Sincerely,

Julie S lengan

cc: Stephen Kozey (Vice President, General Counsel & Secretary Midwest ISO)
JoAnn Thompson (Chair, Midwest ISO Transmission Owners)