FILED

January 31, 2023

INDIANA UTILITY

REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

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)	CAUSE NO. 38707-
)	FAC135
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VERIFIED APPLICATION AND AFFIDAVIT FOR APPROVAL OF A CHANGE(S) IN FUEL COST ADJUSTMENT (ELECTRIC SERVICE)
AND FUEL COST ADJUSTMENT (STEAM SERVICE)

TO THE INDIANA UTILITY REGULATORY COMMISSION:

Duke Energy Indiana, LLC (hereinafter referred to as "Applicant" or "Duke Energy Indiana" or "Company") respectfully represents and shows unto this Commission:

- 1. Applicant is a public electric generating utility corporation organized and existing under the laws of the State of Indiana, and has its principal office at 1000 East Main Street, Plainfield, Indiana. It is engaged in rendering electric utility service in the State of Indiana, and owns, operates, manages and controls, among other things, plants and equipment within the State of Indiana used for the production, transmission, delivery and furnishing of such electric service to the public. It also renders steam service to one customer; namely, International Paper. Applicant is subject to the jurisdiction of this Commission in the manner and to the extent provided by the Public Service Commission Act and other laws of the State of Indiana.
- 2. The names and addresses of the Applicant's attorneys in this matter are Andrew J. Wells and Liane K. Steffes, 1000 East Main Street, Plainfield, Indiana 46168, who are duly authorized to accept service of papers in this Cause on behalf of Applicant.

- 3. The following are the applicable procedural dates for this proceeding, as agreed to by the OUCC and approved in Cause No. 45253:
 - (i) January 31, 2023 the date the Company is filing this Verified Application;
 - (ii) January 31, 2023 the date the Company is prefiling testimony and exhibits supporting this Verified Application;
 - (iii) March 7, 2023 the latest date by which the OUCC and any intervenor shall prefile its testimony and exhibits concerning this Verified Application¹;
 - (iv) March 14, 2023 the latest date by which Duke Energy Indiana shall file rebuttal testimony;
 - (v) On or after March 20, 2023 the day on which the Company requests that the evidentiary hearing concerning this Verified Application be held; and
 - (vi) March 31, 2023 the end target date by which the Company requests the issuance of the Commission's Order concerning this Verified Application.

I. ELECTRIC SERVICE

1. This Application is filed pursuant to the provisions of the Public Service Commission Act (IC 8-1-2-42 (b), (d), (e), (f) and IC 8-1-2-42.3) and pursuant to Orders of the Commission, including the Orders in Cause Nos. 33735-S1, 33735-S2, 37712, 41363, 38707-FAC70, the June 1, 2005 Order in Cause No. 42685 ("MISO Order"), and the Commission's June 30, 2009 Phase II Order in Cause No. 43426 concerning cost recovery related to the Midcontinent Independent System Operator, Inc.'s ("MISO") ancillary services market ("Phase II ASM Order") for the purpose of securing authorization for a change in the fuel cost adjustment applicable to Applicant's electric rate schedules. Applicant will file with the Commission the required additional showing pursuant to a public hearing held subject to the notice provisions required by IC 8-1-1-8.

The Commission Order in Cause No. 38707 FAC76, dated June 25, 2008, approved an Agreement on Synchronization of FAC and RTO Proceedings in which Duke Energy Indiana agreed to extend the time the Indiana Office of Utility Consumer Counselor ("OUCC") has to file its audit report and/or other testimony from the statutory 20 days to 35 days from the date Duke Energy Indiana files its testimony. The Agreement also provided that absent unusual circumstances, and assuming the Company prefiled testimony for both its FAC and RTO cases within 3 business days of each other, the OUCC agreed not to seek extensions of time to submit its audit reports/testimony for each case beyond the 35 days. With the RTO schedule moving from quarterly to annual filings, as approved in Cause No. 42736 RTO 54, this portion of the Agreement is no longer applicable. However, the Agreement provides that the Company and OUCC will cooperate such that the FAC order can be issued prior to the billing month to which the new cost factor is intended to apply.

- 2. This Application reflects changes in operations that began on April 1, 2005, resulting from MISO's implementation of energy markets under MISO's Open Access Transmission and Energy Markets Tariff (now known as MISO's Open Access Transmission and Energy and Operating Reserves Tariff and hereinafter "MISO's Tariff"). Such operational changes include purchases and sales of power and dispatch decisions reflecting MISO's day-ahead and real-time energy markets. This Application also reflects changes in operations that began on January 6, 2009, resulting from MISO's implementation of the ancillary service markets ("ASM") under MISO's Tariff. Such operational changes include purchases and sales of ancillary services and dispatch decisions reflecting MISO's day-ahead and real-time ancillary service markets. The recovery of jurisdictional costs requested in this proceeding and the proposed change in Applicant's fuel cost adjustment factor reflect charges and credits incurred by Applicant on behalf of its jurisdictional customers resulting from Applicant's participation in such markets, consistent with the Commission's prior orders regarding participation in and cost recovery of costs incurred due to participation in these markets.
- 3. This Application is also filed pursuant to the Commission's Order in Cause No. 45253, dated June 29, 2020 (request to change base rates). The Commission's Order in Cause No. 45253 resulted in changes that affect the Company's data filed in the fuel cost adjustment proceedings. For purposes of computing the authorized net operating income for Indiana Code 8-1-2-42(d)(3), the changes in authorized jurisdictional operating revenues and expenses, as well as the jurisdictional allocation percentages, were phased-in over the same period of time as the Company's net operating income for the applicable twelve-month period affected by this Order. The authorized net operating income for the twelve-month ended November 2022 period reflected in this filing is based on the Commission's Order in Cause No. 45253 and the associated Step 2 compliance filing. The Commission's Order in Cause No. 45253 also approved Applicant's proposed base cost of fuel to generate electricity and the cost of fuel included in the cost of net purchased electricity of \$0.026955 per kWh. This Application is also filed pursuant to the Commission's July 3, 2002 Order in consolidated Cause Nos. 42061 and 41744-S1 ("ECR Order"), which approved construction work in progress ratemaking treatment for certain qualified pollution control property and clean energy projects, and the Commission's Orders in subsequent ECR proceedings, including the update approved by the Commission on January 11, 2023, in Cause No. 42061-ECR38. The value of the Company's plant is also subject to update as a result of (1) the Commission's June 25, 2014 Order in Cause No. 44367, which

authorized Duke Energy Indiana to adjust the Company's authorized net operating income to reflect any approved earnings associated with federally mandated compliance projects ("FMCA") included in that proceeding and subsequent update proceedings; (2) the Commission's June 29, 2016 Order in Cause No. 44720, which authorized the Company to adjust its authorized net operating income to reflect approved earnings associated with its investments in transmission, distribution and storage system improvement ("TDSIC") projects included in that proceeding and subsequent update proceedings; and (3) the Commission's July 6, 2016 Order in Cause No. 44734, which authorized adjustment to the Company's authorized net operating income to reflect approved earnings associated with company-owned renewable energy projects ("REP") included in that proceeding and subsequent update proceedings. As stated above, the Commission's Order in Cause No. 45253 approved Applicant's proposed base cost of fuel of \$0.026955 per kWh. Applicant's cost of fuel to generate electricity and the cost of fuel included in the net cost of purchased electricity for the month of November 2022, based on the latest data known to Applicant at the time of filing after excluding prior period costs, hedging, and miscellaneous fuel adjustments, if applicable, was \$0.038333 per kWh as shown on Attachment A, Schedule 9, line 12, column L, attached hereto.

- 4. Duke Energy Indiana has made every reasonable effort to acquire fuel and generate or purchase power or both so as to provide electricity to its retail customers at the lowest fuel cost reasonably possible. Applicant will file testimony showing these facts prior to the date of hearing herein.
- 5. Applicant's testimony will include an explanation of certain financial transactions (*i.e.*, hedging arrangements) that were entered into by the Company on behalf of retail customers. Applicant will show that it entered into such hedging arrangements in order to mitigate the Company's exposure to price volatility in the bulk power market. Applicant requests that it be allowed to recover the net realized gains or losses associated with its hedging activities incurred on behalf of its native load customers. Further, as requested by the Commission in its Order in FAC133, Applicant's testimony proposes changes to its hedging program following discussion with the OUCC and industrial customers.
- 6. Applicant's fuel cost adjustment factor takes into account charges and revenues incurred and received by the Applicant resulting from Applicant's participation in the energy and ancillary services markets of MISO's Tariff, as authorized by the Commission in Cause No. 42685 and other Commission orders. In addition, the Commission's Order in Cause No. 45253

approved the inclusion of fuel-related PJM charges and credits associated with operations of the Company's Madison Generating Station in the Applicant's fuel cost adjustment factor subsequent to the effective date of the Order. Pursuant to the Commission's Phase II ASM Order, Applicant is authorized to recover certain new or modified MISO charges and credits resulting from its participation in ASM as a cost of fuel in its FAC proceedings and recover and account for Day Ahead RSG Distribution Amounts and Real Time RSG First Pass Distribution Amounts in FAC proceedings. Applicant has included MISO and PJM costs and credits in its fuel cost in this proceeding in accordance with the MISO Order, the base rate case order in Cause No. 45253, the Phase II ASM Order and other applicable Orders. Applicant will also provide testimony reporting the monthly average ASM cost distribution amounts paid for Regulation, Spinning, and Supplemental Reserves.

- 7. Actual increases in Applicant's fuel costs for the 12 months ended November 30, 2022, have not been offset by actual decreases in other operating expenses. Applicant will file testimony and exhibits showing these facts prior to the date of hearing herein.
- 8. Applicant will file testimony and attachments that will compare actual jurisdictional earnings and expenses for the twelve (12) months ended November 30, 2022, to the phased-in jurisdictional return and expenses authorized by the Commission's Order in Cause No. 45253 and the associated Step 2 compliance filing, and subsequent ECR, FMCA, TDSIC, and REP orders, as applicable.
- 9. The reconciliation of the actual incremental cost of fuel billed retail customers for the three (3) months ended November 30, 2022, resulted in a negative variance factor (*i.e.*, actual net jurisdictional fuel costs per kilowatt-hour incurred were less than fuel costs billed customers, resulting in a net over-collection of fuel costs).
- 10. Applicant's net fuel charge in this proceeding is \$0.036503 per kWh; the net fuel charge in Cause No. 38707-FAC134 was \$0.063103 per kWh. The net fuel charge in this proceeding less the base cost of fuel of \$0.026955 will result in a fuel cost adjustment factor of \$0.009548 per kWh applicable to bills rendered by Applicant commencing with the first billing cycle upon the later of the date of approval by the Commission or the first April 2023 billing cycle (See Attachment A, Schedule 1).

Approval of the Company's proposed factor will result in the following estimated bill impacts by customer class:

<u>Customer Class</u>	Estimated Bill Impact ² ³
Residential (based on typical customer at 1,000 kWh)	15.9% decrease
Commercial (based on three different sets of energy and demand	>12.9% decrease
billing determinants)	
Industrial (based on four different sets of energy and demand	>18.6% decrease
billing determinants)	

11. The books and records of Applicant supporting data filed in this proceeding are kept in accordance with the Uniform System of Accounts for Electric Utilities prescribed by this Commission and are available for inspection and review by the OUCC and this Commission.

WHEREFORE, Applicant respectfully prays that the Indiana Utility Regulatory Commission hold a hearing pursuant to IC 8-1-2-42(a) and (d) and enter an order in this Cause:

- authorizing and approving the reconciliation of incremental fuel costs billed to incremental fuel costs actually incurred during the months of September through November 2022;
- ii) authorizing and approving the recovery of net realized gains and losses attributable to certain hedging activities;
- authorizing and approving the estimated fuel cost adjustment factor of \$0.009548 per kWh to become effective upon the later of the date of approval by the Commission or the first billing cycle of April 2023;
- iv) accepting for filing Applicant's tariff modifications reflecting the estimated fuel cost adjustment factor;
- v) issuing such order within twenty (20) days from the date the Commission receives the OUCC audit report; and

² Estimated bill impact reflects comparison of change between proposed fuel cost rider factor and current factor as compared to total bill (base bill and all other riders) as of January 13, 2023.

³ Bill impacts will vary based on customer usage specifics within each class. For the residential class, usage has been assumed at 1,000 kWh. For the commercial and industrial classes, the percentage reflects the highest estimated bill impact based on bill calculations at representative data points for each group as follows: commercial usage at (a) 3 KW/375kWh, (b) 40 KW/10,000 kWh, and (c) 500 KW/150,000 kWh and industrial usage at (a) 75 KW/15,000 kWh, (b) 75KW/50,000 kWh, (c) 50,000 KW/15,000,000 kWh, and (d) 50,000 KW/25,000,000 kWh.

vi) making such other and further orders in the proceeding, as the Commission may deem appropriate.

II. STEAM SERVICE

- 1. This Application is filed pursuant to the Order of the Commission in Cause No. 44087 and pursuant to the provisions of the Public Service Commission Act (IC 8-1-2-42) for the purpose of securing authorization for changes in Applicant's fuel cost adjustment applicable to its rendering of steam service to International Paper.
- 2. Applicant hereby incorporates by this reference all applicable paragraphs of Part I of this Application.
- 3. Applicant's proposed factors have been calculated in accordance with the fuel cost adjustment formula contained in the Commission's Order in Cause No. 45740.
- 4. The calculation showing the proposed fuel cost adjustment is shown on Attachment B. Schedule 1.
- 5. Applicant's estimated fuel cost for April through June 2023 is 35.8346808 mills per kWh. This amount, when multiplied by the equivalent conversion factor per 1000 pounds of steam of .1084, results in a cost factor of \$3.8844794 per thousand pounds of steam. This cost factor, less the base cost of fuel of \$2.921922 per 1000 pounds of steam will result in a fuel cost adjustment factor of \$0.9625574 per 1000 pounds of steam.

A reconciliation of the actual fuel cost adjustment incurred to the estimated fuel cost adjustment billed for the months of September through November 2022 is shown on Attachment B, Schedule 2. The total reconciliation adjustment of \$(132,824) will be applied to International Paper's monthly bill for high-pressure steam service in three monthly installments, upon approval of such amount by the Commission.

6. The books and records of Applicant supporting such data and calculation are available for inspection and review by the OUCC and this Commission.

WHEREFORE, Applicant respectfully prays that the Indiana Utility Regulatory Commission hold a hearing and enter an order in this Cause:

 authorizing and approving the changes in its existing fuel cost adjustment charge based upon the costs of fuel shown on said Attachment B, Schedule 1 applicable to Applicant's Commission approved contract for rendering steam service to International Paper;

- authorizing such changes to become effective upon the later of the date of approval by the Commission or the bill rendered to International Paper in April 2023 by Applicant for steam service;
- iii) authorizing and approving the reconciliation adjustments to International Paper as shown on Attachment B, Schedule 2 for the September through November 2022 timeframe;
- iv) issuing such order within twenty (20) days from the date the Commission receives the OUCC audit report; and
- v) making such other and further orders in the proceeding, as the Commission may deem appropriate and proper.

[SIGNATURE PAGE TO FOLLOW]

	Church & vylog
By:	
,	Christa L. Graft, Manager Rates and Regulatory Strategy

Andrew J. Wells, Associate General Counsel

VERIFICATION

I hereby verify under the penalties of perjury that the for	egoing representations are true to
the best of my knowledge, information and belief.	

Dated: __January 31, 2023

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing Verified Application and Affidavit delivered electronically to the following:

Lorraine Hitz
Michael Eckert
Office of Utility Consumer Counselor
115 W. Washington Street, Suite 1500 South
Indianapolis, Indiana 46204
LHitz@oucc.in.gov
meckert@oucc.in.gov
infomgt@oucc.in.gov

In addition, copies have been distributed electronically, for informational purposes, to the following:

hol

Financial Solutions Group, Inc. 2680 East Main Street
Suite 223
Plainfield, Indiana 46168
Attn: Gregory T. Guerrettaz
greg@fsgcorp.com
kristen@fsgcorp.com
fsg@fsgcorp.com

Dated this 31st day of January 2023.

Andrew J. Wells, Atty. No. 29545-49

Liane K. Steffes, Atty. No. 31522-41

Duke Energy Business Services LLC

1000 East Main Street

Plainfield, Indiana 46168

(317) 838-2461 (office)

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Determination of Retail Fuel Cost Adjustment Factor to be Effective Upon the Order of the Commission Based on Estimated Average Fuel Costs for the Months of April, May, and June 2023

Line				Esti	mated Month of:			_			Estimated Three-Month		Line
No.	Description		April 2023		May 2023		June 2023		Total		Average	Source	No.
	MWh Source:		(A)		(B)		(C)		(D)		(E)	(F)	
1	Steam Generation		1,088,093		1,344,270		1,641,111		4,073,474		1,357,824	Sch.2,Ln 7	1
2	Nuclear Generation		1,000,093		1,344,270		1,041,111		4,073,474		1,337,024	Sch.2,Ln 7 Sch.2,Ln 8	2
3	Hydro and Solar Generation		41,809		43,495		42,372		127,676		42,559	Sch.2,Ln 8 Sch.2,Ln 9	3
3	Other Generation		41,009		43,493		42,372		127,070		42,559	Sch.2,Lh 9	3
4	Internal Combustion		_		_		_		_		_	Sch.2,Ln 10	4
5	Gas Combustion Turbine		360,996		334.910		385,216		1.081.122		360.374	Sch.2.Ln 11	5
6	Integrated Gasification Combined Cycle		338,952		360,678		418,392		1,118,022		372,674	Sch.2,Ln 12	6
7	Purchased Power		506,434		411,928		246,490		1,164,852		388,284	Sch.3,Col.A	7
,	Less:		300,434		411,320		240,430		1,104,002		300,204	GCII.G,COI.A	,
8	Intersystem Sales		_		_		_		_		_	Sch.4,Col.A	8
9	Energy Losses & Company Use		121,720		129,795		143,394		394,909		131,636	301.4,001.A	9
0	Energy 200000 a Company Coc		121,720	_	120,700	•	140,004	_	004,000		101,000		3
10	Sales (S)		2,214,564		2,365,486		2,590,187		7,170,237		2,390,079		10
10	Sales (S)		2,214,304	_	2,303,400	-	2,390,107	_	1,110,231		2,390,079		10
	Fuel Cost:												
11	Steam Generation	\$	34,128,000	\$	42,495,000	,	\$ 52,858,000	\$	129,481,000		\$ 43,160,333	Sch.2,Ln 1	11
12	Nuclear Generation		-		-		-		-		-	Sch.2,Ln 2	12
13	Hydro and Solar Generation		-		-		-		-		-		13
	Other Generation												
14	Internal Combustion		-		-		-		-		-	Sch.2,Ln 3	14
15	Gas Combustion Turbine		15,651,000		13,090,000		14,488,000		43,229,000		14,409,667	Sch.2,Ln 4	15
16	Integrated Gasification Combined Cycle		9,080,000		9,713,000		13,088,000		31,881,000		10,627,000	Sch.2,Ln 5	16
17	Hedging Position 1/2		4,845,820		2,263,279		1,774,478		8,883,577		2,961,192		17
18	Purchased Power		24,495,000		19,937,000		11,881,000		56,313,000		18,771,000	Sch 3, Col. C	18
19	Net MISO Energy Market		587,000		526,000		1,518,000		2,631,000		877,000		19
20	Net MISO Ancillary Services Market		-		-		-		-		-		20
	Less:												
21	Intersystem Sales		-		-		-		-		-	Sch.4,Col.C	21
22	Steam Sales		454,000		455,000		415,000	_	1,324,000		441,333	Sch.5,Ln 4	22
23	Total Fuel Cost (F)	\$	88,332,820	\$	87,569,279	9	\$ 95,192,478	\$	271,094,577		\$ 90,364,859		23
											07.000		
24	F/S (Mills Per kWh)										37.808		24
	Months to be Reconciled												
		S	eptember 2022		October 2022		November 2022		3 Months Total				
25	Monthly Fuel Cost Beconsiliation Variance	\$	17,289,594	\$	(2.010.226)		¢ (21 E00 624)	Ф	(0.024.266)	0/		0-1-0-	O.F.
25	Monthly Fuel Cost Reconciliation Variance	Ф	17,289,594	Ф	(3,810,326)		\$ (21,500,634)	Ф	(8,021,366)	2/		Sch.6s	25
26	Net FAC135 Reconciliation Factor												
	-\$ 8,021,366 / 6,144,866 MWhrs										(1.305)		26
27	Subtotal										36.503		27
28	Less: Base Cost of Fuel Included in Rates										26.955		28
29	Total Fuel Cost Adjustment Factor (Mills Per kWh)										9.548		29

^{1/} These hedging amounts are based on a "marked" current value of the underlying hedging contracts, and therefore their value could fluctuate until settlement when the ultimate gain or loss on the contracts is known.

^{2/} See Attachment A, Schedule 6, Page 3 of 3.

Determination of the
Estimated Cost of Fuel Consumed (Account 151)
and Net Generation (MWh Output)
for the Months of April, May, and June 2023
Used in Developing the Retail Fuel Cost Factor to be
Effective Upon the Order of the Commission

Lina				Es	timated Month	of:		-			Estimated hree-Month	Line
Line No.	Description		April 2023		May 2023		June 2023		Total		Average	Line No.
	Fuel Cost:		(A)		(B)		(C)		(D)		(E)	
1	Steam Generation	\$	34,128,000	\$	42,495,000	\$	52,858,000	\$	129,481,000	\$	43,160,333	1
2	Nuclear Generation Other Generation -		-		-		-		-		-	2
3	Internal Combustion Gas Combustion Turbine		1E CE1 000		12 000 000		14 400 000		42 220 000		14 400 667	3
4 5	Integrated Gasification Combined Cycle		15,651,000 9.080.000		13,090,000 9,713,000		14,488,000 13,088,000		43,229,000 31,881,000		14,409,667 10,627,000	4 5
5	integrated Gasincation Combined Cycle		9,000,000		9,713,000	_	13,000,000	_	31,001,000	_	10,027,000	5
6	Total Fuel Cost	\$	58,859,000	\$	65,298,000	\$	80,434,000	\$	204,591,000	\$	68,197,000	6
	Net Generation MWh Output:											
7	Steam Generation		1,088,093		1,344,270		1,641,111		4,073,474		1,357,824	7
8	Nuclear Generation		-		-		-		-		-	8
9	Hydro and Solar Generation Other Generation -		41,809		43,495		42,372		127,676		42,559	9
10	Internal Combustion		_		-		-		-		-	10
11	Gas Combustion Turbine		360,996		334,910		385,216		1,081,122		360,374	11
12	Integrated Gasification Combined Cycle	_	338,952		360,678	_	418,392		1,118,022		372,674	12
13	Total Net Generation	_	1,829,850		2,083,353		2,487,091	_	6,400,294	_	2,133,431	13

Determination of Estimated

Net Energy Costs of Native Load Purchased Power
for the Months of April, May, and June 2023

Used in Developing the Retail Fuel Cost Factor to be

Effective Upon the Order of the Commission

Line No.	Type of Power	MWh Purchased	Demand	Fuel	Other		Total	Total	Line No.
NO.	Type of Fower						Energy		NO.
	Amril 2022	(A)	(B)	(C)	(D)		(E)	(F)	
1	April 2023 Various Purchases 1/	506,434	\$ -	\$ 24,495,000	\$	-	\$ 24,495,000	\$ 24,495,000	1
2	May 2023 Various Purchases 1/	411,928	-	19,937,000		-	19,937,000	19,937,000	2
3	June 2023 Various Purchases 1/	246,490		 11,881,000			11,881,000	 11,881,000	3
4	Total Purchased Power	1,164,852	\$ -	\$ 56,313,000	\$		<u>\$ 56,313,000</u>	\$ <u>56,313,000</u>	4

^{1/} Includes budget amounts related to purchases from Benton County Wind Farm, LLC from PPA approved by the Commission Order in Cause No. 43097, dated December 6, 2006, solar PPA's approved in Cause No. 44578, dated August 19, 2015, and Staunton Solar PPA approved in Cause No. 44953, dated November 21, 2017.

Determination of Estimated Fuel Costs (Account 151)
Recovered Through Intersystem Sales
for the Months of April, May, and June 2023
Used in Developing the Retail Fuel Cost Factor to be
Effective Upon the Order of the Commission

				Energy Charge									
						Fue	l Cost			T	otal		
Line			MWh		emand	(Ac	counts	0	ther		ergy	Total	Line
No.	Type of Transaction		Sold	С	harge		51)		osts		arge	Charges	No.
	<u>April 2023</u>		(A)		(B)		(C)		(D)	((E)	(F)	
1	Power Coordination Agreement Sales	_1/		- \$	_	\$	-	\$	_	\$	-	\$	- 1
	<u>May 2023</u>												
2	Power Coordination Agreement Sales	_1/		_	_		_		_		-		- 2
	<u>June 2023</u>												
3	Power Coordination Agreement Sales	_1/		<u>-</u>									<u>-</u> 3
4	Total Intersystem Sales	=		<u>-</u> \$		\$		\$		\$	-	\$	<u>-</u> 4

_1/ Power Coordination Agreements terminated on December 31, 2014.

Determination of Estimated Equivalent Fuel Costs Recovered Through the Sale of Steam for the Months of April, May, and June 2023 Used in Developing the Retail Fuel Cost Factor to be Effective Upon the Order of the Commission

Line				Esti	mated Month o	of:					stimated ree-Month		Line
No.	Description		April 2023		May 2023		June 2023		Total		Average	Source	No.
			(A)		(B)		(C)		(D)		(E)		
1	Total Pounds of Steam Supplied (000's)		116,930		117,078		106,845		340,853		113,618		1
2	Total Equivalent kWh Generated (000's) At Cayuga, Other Generating Stations Of the Company and Through Purchased Power Transactions (Note 1)		12,675		12,691		11,582		36,948		12,316		2
3	Equivalent Cost per 1000 lbs Steam (Note 2)		3.8844794		3.8844794	_	3.8844794						3
4	Fuel Costs Recovered Through the												
	Sale of Steam (Line 1 * Line 3) (Rounded to 000's)	\$	454,000	\$	455,000	\$	415,000	\$	1,324,000	\$	441,333		4
	Note 1: Equivalent MWh = 0.1084 * Line 1 Note 2: Fuel Cost Steam Generation Nuclear Generation Other Generation Internal Combustion Gas Combustion Turbine Integrated Gasification Combined Cycle Hedging Position Purchased Power Net MISO Energy Market Net MISO Ancillary Services Market Less: Intersystem Sales Total Fuel Costs	\$	34,128,000 - 15,651,000 9,080,000 4,845,820 24,495,000 587,000	\$	42,495,000 - 13,090,000 9,713,000 2,263,279 19,937,000 526,000 - -	\$	52,858,000 - 14,488,000 13,088,000 1,774,478 11,881,000 1,518,000	\$	129,481,000 - 43,229,000 31,881,000 8,883,577 56,313,000 2,631,000 - - 272,418.577		43,160,333 - 14,409,667 10,627,000 2,961,192 18,771,000 877,000 - - 90,806,192	Sch. 2, Li Sch. 2, Li Sch. 2, Li Sch. 2, Li Sch. 2, Li Sch. 1, Li Sch. 1, Li Sch. 1, Li Sch. 4, C	n 2 n 3 n 4 n 5 n 17 n 18 n 19 n 20
	MWh												
	Sales (S) Energy Losses & Company Use Equivalent kWh - Steam Sale		2,214,564 121,720 12,675		2,365,486 129,795 12,691		2,590,187 143,394 11,582	_	7,170,237 394,909 36,948		2,390,079 131,636 12,316	Sch. 1, Li Sch. 1, Li Sch. 5, Li	n 9
	Total kWh (K)		2,348,959		2,507,972	_	2,745,163	_	7,602,094		2,534,031		
	F/K (Mills Per kWh)									3	35.8346808		
	Equivalent Cost per 1000 lbs Steam (Mills Per kWI	h * 0.	1084)							\$	3.8844794		

Reconciliation of Actual Incremental Cost of Fuel Incurred to Actual Incremental Cost of Fuel Billed Retail Customers for the September 2022 Billing Cycle

Line No.	Class of Customers	MWh Sold	Base Cost of Fuel Included in Rates 26.955 Mills/kWh	Actual Cost of Fuel Incurred - 54.273 Mills/kWh (See Sch. 7)	Actual Incremental Cost of Fuel Incurred	Actual Incremental Cost of Fuel Billed Excluding Utility Receipts Tax	Fuel Cost Variance from Cause No. 38707- FAC 131 and 132	Incremental Fuel Clause Revenues to be Reconciled with Actual Incremental Cost of Fuel Incurred	Fuel Cost Variance (Over) or Under Billing	Line No.
		(A)	(B)	(C)	(D) (Col.C) - (Col.B)			(G) (Col. E) - (Col. F)	(H) (Col. D) - (Col. G)	
1	Total Residential	776,573	\$ 20,932,525	\$ 42,146,946	\$ 21,214,421	\$ 26,614,456	\$ 9,285,168	\$ 17,329,288	\$ 3,885,133	1
2	Total Commercial	641,354	17,287,697	34,808,206	17,520,509	20,943,684	7,668,409	13,275,275	4,245,234	2
3	Total Industrial	992,731	26,759,064	53,878,490	27,119,426	30,251,065	11,869,681	18,381,384	8,738,042	3
4	Total Other	170,741	4,602,324	9,266,626	4,664,302	6,284,598	2,041,481	4,243,117	421,185	4
5	Total Retail kWh Sales Subject to Fuel Clause Adjustment	2,581,399	<u>\$ 69,581,610</u>	<u>\$ 140,100,268</u>	\$ 70,518,658	\$ 84,093,803	<u>\$ 30,864,739</u>	\$ 53,229,064	<u>\$ 17,289,594</u>	5
6	Retail kWh Sales Not Subject to the Fuel Clause Adjustment	42,666								6
7	kWh Sales for Resale	288,918								7
8	Sales	2,912,983								8

Reconciliation of Actual Incremental Cost of Fuel Incurred to Actual Incremental Cost of Fuel Billed Retail Customers for the October 2022 Billing Cycle

Line No.	Class of Customers	Base Cost of Fuel Included in Rates MWh 26.955 Sold Mills/kWh		of Fuel of Fuel Included in Incurred - Rates 52.100 26.955 Mills/kWh		C	Actual acremental ost of Fuel Incurred	Exc	Actual ncremental cost of Fuel Billed cluding Utility eceipts Tax	fr N	Fuel Cost Variance rom Cause No. 38707- C 132 and 133	Cla to I	remental Fuel use Revenues be Reconciled with Actual remental Cost Fuel Incurred	Fuel Cost Variance (Over) or Unde Billing		Line No.	
		(A)	(B)		(C)		(D) (Col.C) - (Col.I			(E)		(F)	(Co	(G) bl. E) - (Col. F)	(H) (Col. D) - (Col. (
1	Total Residential	504,662	\$	13,603,164	\$	26,292,890	\$	12,689,726	\$	22,118,151	\$	8,723,724	\$	13,394,427	\$	(704,701)	1
2	Total Commercial	713,289		19,226,705		37,162,357		17,935,652		28,323,684		12,330,108		15,993,576		1,942,076	2
3	Total Industrial	227,642		6,136,090		11,860,149		5,724,059		12,300,970		3,935,081		8,365,889		(2,641,830)	3
4	Total Other	561,622		15,138,521		29,260,506		14,121,985		26,236,207		9,708,351		16,527,856		(2,405,871)	4
5	Total Retail kWh Sales Subject to Fuel Clause Adjustment	2,007,215	<u>\$</u>	<u>54,104,480</u>	<u>\$ 1</u>	104,575,902	\$	50,471,422	<u>\$</u>	88,979,012	<u>\$</u>	34,697,264	<u>\$</u>	54,281,748	<u>\$</u>	(3,810,326)	5
6	Retail kWh Sales Not Subject to the Fuel Clause Adjustment	23,759															6
7	kWh Sales for Resale	217,040															7
8	Sales	2,248,014															8

Reconciliation of Actual Incremental Cost of Fuel Incurred to Actual Incremental Cost of Fuel Billed Retail Customers for the November 2022 Billing Cycle

Line No.	Class of Customers	Base Cost of Fuel Included in Rates MWh 26.955 Class of Customers Sold Mills/kWh		Actual Cost of Fuel Incurred - 43.409 Mills/kWh (See Sch. 7)	Actual Incremental Cost of Fuel Incurred	Actual Incremental Cost of Fuel Billed Excluding Utility Receipts Tax	Fuel Cost Variance from Cause No. 38707- FAC 132 and 133	Incremental Fuel Clause Revenues to be Reconciled with Actual Incremental Cost of Fuel Incurred	Fuel Cost Variance (Over) or Under Billing	Line No.		
		(A)	(B)	(C)	(D) (Col.C) - (Col.B)	(E) (F)		(G) (Col. E) - (Col. F)	(H) (Col. D) - (Col. G)			
1	Total Residential	543,773	\$ 14,657,401	\$ 23,604,642	\$ 8,947,241	\$ 24,991,370	\$ 9,914,835	\$ 15,076,535	\$ (6,129,294)	1		
2	Total Commercial	446,966	12,047,969	19,402,347	7,354,378	20,207,768	8,149,713	12,058,055	(4,703,677)	2		
3	Total Industrial	775,901	20,914,411	33,681,087	12,766,676	35,721,709	14,147,320	21,574,389	(8,807,713)	3		
4	Total Other	136,310	3,674,236	5,917,081	2,242,845	6,588,191	2,485,396	4,102,795	(1,859,950)	4		
5	Total Retail kWh Sales Subject to Fuel Clause Adjustment Retail kWh Sales Not	1,902,950	<u>\$ 51,294,017</u>	<u>\$ 82,605,157</u>	<u>\$ 31,311,140</u>	\$ 87,50 <u>9,038</u>	\$ 34,697,26 <u>4</u>	\$ 52,811,774	(21,500,634)	5		
6	Subject to the Fuel Clause Adjustment	23,031								6		
7	kWh Sales for Resale	162,629								7		
8	Sales	2,088,610								8		
9	Fuel Cost Variance from	the September 2	2022 Billing Cycle (S	See Attachment A,	Schedule 6, Page 1	I of 3, Column H)			17,289,594	9		
10	10 Fuel Cost Variance from the October 2022 Billing Cycle (See Attachment A, Schedule 6, Page 2 of 3, Column H)											
11	Total Fuel Cost Variance	e for the Three (3) Months Ended No	vember 2022					\$ (8,021,366)	11		

Determination of Fuel Cost Per kWh Based on Actual Fuel Cost for September 2022

Line No.	Description		Fotal Actual ptember 2022		WVPA 70MW Firm Sale	Wholesale Formula Rate ASM 4/		djusted Actual	Line No.
140.	Description	36	(A)		(B)	(C)		(D)	NO.
	<u>kWh Sales (000's):</u>								
	Native Load Sales								
	Retail								
1	Residential		776,573					776,573	1
2	Commercial		641,354					641,354	2
3	Industrial		1,009,190					1,009,190	3
4	Public Street and Highway Lighting		6,020					6,020	4
5	Other Public Authorities		190,928					190,928	5
6	Billed Retail Sales		2,624,065					2,624,065	6
7	Unbilled Retail Sales		(269,349)					(269,349)	7
8	Wholesale Sales		288,918		44,100	244,818		<u>-</u>	8
9	Total Native Load Sales (S)		2,643,634		44,100	244,818		2,354,716	9
	Fuel Cost:								
10	Native Load Fuel Cost, Including Virtual Energy Amounts 1/	\$	146,790,130	\$	2,608,932	\$ 14,191,064	\$	129,990,134	10
11	Realized Hedging Activity, Excluding Virtual Energy Amounts 2/		3,810,710		63,569	352,897		3,394,244	11
12	Wind and Solar REC Proceeds 5/		(252,018)		(4,204)	(23,339)	(224,475)	12
13	Prior Period Hedging Adjustment 6/		24,287		405	2,249		21,633	13
14	Prior Period Cost Adjustments 3/		(5,921,580)		16,648	(555,032)	(5,383,196)	14
15	Total Fuel Cost (F)	\$	144,451,529	\$	2,685,350	\$ 13,967,839	\$	127,798,340	15
16	Fuel Cost - Mills per kWh (F/S)		54.641	_	60.892	57.054	_	54.273	16

^{1/} In accordance with the Commission's June 1, 2005 Order in Cause No. 42685 and pertinent subsequent Commission directives, the Company's total native load fuel cost includes applicable MISO costs which were incurred to serve Duke Energy Indiana's native load customers' energy requirements. This line also includes energy costs for third-party solar PPAs, gas costs and steam revenues for the Purdue CHP plant, and payments to customers for excess distributed generation.

- 2/ Hedging component subtotals follow: LMP hedging total \$6,180,026; Gas hedging total (\$2,369,316).
- 3/ Prior Period Adjustment Totals by month: 1)Jun22 S105 (\$892,744); 2)Jul22 S105 (\$2,624,982); 3)Aug22 S105 (\$2,403,854).
 - Prior Period Adjustment WVPA 70 by month: 1)Jun22 S105 \$36,964; 2)Jul22 S105 (\$8,703); 3)Aug22 S105 (\$11,613).
 - Prior Period Adjustment Wholesale Formula Rate by month: 1)Jun22 S105 \$7,478; 2)Jul22 S105 (\$275,906); 3)Aug22 S105 (\$286,604).
- 4/ Adjustment to native load fuel cost to reflect that certain of the Company's wholesale formula rates customers are billed directly by MISO for the three ASM cost distribution charge types (i.e. regulation, spinning and supplemental) related to their load. Therefore, the full amount of these charge types is directly attributable to the Company's remaining native load customers.
- 5/ Net proceeds received during the month from the sale of renewable energy credits (RECs) associated with Company's wind and solar PPAs.
- 6/ Prior Period Hedging Adjustment Totals by Month: 1)Jun22 S105 LMP \$6,366; 2)Jul22 S105 LMP \$6,079; 3)Aug22 S105 LMP \$11,842.

Determination of Fuel Cost Per kWh Based on Actual Fuel Cost for October 2022

Line No.	Description	otal Actual		WVPA 70MW Firm Sale	Wholesale Fo		justed Actual ctober 2022	Line No.
	kWh Sales (000's):	 (A)		(B)	(C)		 (D)	
	Native Load Sales Retail							
1	Residential	504,662					504,662	1
2	Commercial	713,289					713,289	2
3	Industrial	245,245					245,245	3
4	Public Street and Highway Lighting	5,942					5,942	4
5	Other Public Authorities	 561,836					 561,836	5
6	Billed Retail Sales	2,030,974					2,030,974	6
7	Unbilled Retail Sales	(104,599)					(104,599)	7
8	Wholesale Sales	 217,040	_	31,850	1	85,190	 	8
9	Total Native Load Sales (S)	 2,143,415	_	31,850	1	85,190	 1,926,375	9
	Fuel Cost:							
10	Native Load Fuel Cost, Including Virtual Energy Amounts 1/	\$ 102,351,337	\$	1,514,329	\$ 8,4	63,285	\$ 92,373,723	10
11	Realized Hedging Activity, Excluding Virtual Energy Amounts 2/	9,044,074		134,390	7	81,404	8,128,280	11
12	Wind and Solar REC Proceeds 5/	(152,417)		(2,265)	(13,169)	(136,983)	12
13	Prior Period Cost Adjustments 3/		_					13
14	Total Fuel Cost (F)	\$ 111,242,994	\$	1,646,454	\$ 9,2	31,520	\$ 100,365,020	14
15	Fuel Cost - Mills per kWh (F/S)	 51.900	_	51.694		49.849	 52.100	15

In accordance with the Commission's June 1, 2005 Order in Cause No. 42685 and pertinent subsequent Commission directives, the Company's total native load fuel cost includes applicable MISO costs which were incurred to serve Duke Energy Indiana's native load customers' energy requirements. This line also includes energy costs for third-party solar PPAs, gas costs and steam revenues for the Purdue CHP plant, and payments to customers for excess distributed generation.

- 2/ Hedging component subtotals follow: LMP hedging total \$6,078,867; Gas hedging total \$2,965,207.
- 3/ Prior Period Adjustment Totals by month: None. Prior Period Adjustment WVPA 70 by month: None. Prior Period Adjustment Wholesale Formula Rate by month: None.
- 4/ Adjustment to native load fuel cost to reflect that certain of the Company's wholesale formula rates customers are billed directly by MISO for the three ASM cost distribution charge type (i.e. regulation, spinning and supplemental) related to their load. Therefore, the full amount of these charge types is directly attributable to the Company's remaining native load custom
- 5/ Net proceeds received during the month from the sale of renewable energy credits (RECs) associated with Company's wind and solar PPAs.

Determination of Fuel Cost Per kWh Based on Actual Fuel Cost for November 2022

Line No.	Description	Total Actual November 2022	WVPA 70MW Firm Sale	Wholesale Formula Rate ASM 4/	Adjusted Actual November 2022	Line No.
	<u>kWh Sales (000's):</u>	(A)	(B)	(C)	(D)	-
	Native Load Sales					
	Retail					
1	Residential	543,773			543,773	1
2	Commercial	446,966			446,966	2
3	Industrial	791,902			791,902	3
4	Public Street and Highway Lighting	5,502			5,502	4
5	Other Public Authorities	137,838			137,838	5
6	Billed Retail Sales	1,925,981			1,925,981	6
7	Unbilled Retail Sales	118,158			118,158	7
8	Wholesale Sales	162,629	21,490	141,139		8
9	Total Native Load Sales (S)	2,206,768	21,490	141,139	2,044,139	9
	Fuel Cost:					
10	Native Load Fuel Cost, Including Virtual Energy Amounts 1/	\$ 84,591,546	\$ 779,031	\$ 5,140,760	\$ 78,671,755	10
11	Realized Hedging Activity, Excluding Virtual Energy Amounts 2/	11,418,081	111,192	730,270	10,576,619	11
12	Wind and Solar PPA REC Proceeds 5/	(555,041)	(5,405)	(35,499)	(514,137)	12
13	Prior Period Cost Adjustments 3/					13
14	Total Fuel Cost (F)	\$ 95,454,586	\$ 884,818	\$ 5,835,531	\$ 88,734,237	14
15	Fuel Cost - Mills per kWh (F/S)	43.255	41.173	41.346	43.409	15

^{1/} In accordance with the Commission's June 1, 2005 Order in Cause No. 42685 and pertinent subsequent Commission directives, the Company's total native load fuel cost includes applicable MISO costs which were incurred to serve Duke Energy Indiana's native load customers' energy requirements. This line also includes energy costs for third-party solar PPAs, gas costs and steam revenues for the Purdue CHP plant, and payments to customers for excess distributed generation.

- 2/ Hedging component subtotals follow: LMP hedging total \$6,225,559; Gas hedging total \$5,192,522.
- 3/ Prior Period Adjustment Totals by month: None. Prior Period Adjustment WVPA 70 by month: None. Prior Period Adjustment Wholesale Formula Rate by month: None.
- 4/ Adjustment to native load fuel cost to reflect that certain of the Company's wholesale formula rates customers are billed directly by MISO for the three ASM cost distribution charge (i.e. regulation, spinning and supplemental) related to their load. Therefore, the full amount of these charge types is directly attributable to the Company's remaining native load cus
- 5/ Net proceeds received during the month from the sale of renewable energy credits (RECs) associated with Company's wind and solar PPAs.

Summary of Fuel Costs Incurred to Meet Native Load
Requirements by Week to Be Recovered Via the Fuel Adjustment Clause
for the Months of September, October and November 2022

		[DEI Generation Fuel for	or		Charges Correspond			eration Total Expense		Other MISO Charges and/or Credits Allocated					otal Via		
Line		*****	DEI Native Load 1/	* /****		to Serve DEI Native			DEI Native Load	* ******	to DEI Native Load 3/		Native Load Purchases			ment Clause 5/	* *****	Line
No.		MWh	(B)	\$/MWh	MWh	\$	\$/MWh	MWh	\$ (H)	\$/MWh	(J)	MWh	\$ (L)	\$/MWh	MWh (N)	(O)	\$/MWh	No.
	September 2022	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	
1	01 - 03	140.234.401	5.672.526.67	40.45	140.234.401	509.287.09	3.63	140.234.401	6.181.813.76	44.08	(5,501,490.62)	128,404,364	13.457.124.51	104.80	268.638.765	14.137.447.65	52.63	1
2	04 - 10	348.636.294	13,778,081.49	39.52	348,636.294	1.725.494.31	4.95	348.636.294	15.503.575.80		(1,380,059.88)	259.197.031	23.915.432.21	92.27	607.833.325	38.038.948.13	62.58	2
3	11 - 17	366,892.337	14,169,324.32	38.62	366,892.337	1,828,378.44	4.98	366,892.337	15,997,702.76		(2,179,209.76)	217,026.862	20,957,938.23	96.57	583,919.199	34,776,431.23	59.56	3
4	18 - 24	359.377.898	15,261,952.78	42.47	359,377.898	663.875.55	1.85	359,377,898	15,925,828.33	44.31	(2,412,590.82)	245,130.371	23,938,202.51	97.65	604.508.269	37,451,440.02	61.95	4
5	25 - 30	156,429.696	5,966,170.88	38.14	156,429.696	1,072,885.19	6.86	156,429.696	7,039,056.07	45.00	(607,881.48)	262,407.980	16,305,059.89	62.14	418,837.676	22,736,234.48	54.28	5
6	Subtotals	1,371,570.626	54,848,056.14	39.99	1,371,570.626	5,799,920.58	4.23	1,371,570.626	60,647,976.72	44.22	(12,081,232.56)	1,112,166.608	98,573,757.35	88.63	2,483,737.234	147,140,501.51	59.24	6
7													WVPA-IMPA	.,	(331,768.002)	(18,305,421.67)	55.18	7
8												Native /	Alloc. Of Gas Pipeline			311,029.59		8
9													Other Fuel Cost	Adjustments _		-		9
10														=	2,151,969.232	129,146,109.43	60.01	10
	ſ										Other MISO Charges							
		[El Generation Fuel fo	or	MISO Total Net	Charges Correspond	ding to	DEI Gene	eration Total Expense		and/or Credits Allocated				Т	otal Via		
			DEI Native Load 1/		DEI Gen. Allocated	to Serve DEI Native	e Load 2/	for E	DEI Native Load		to DEI Native Load 3/	Total DEI I	Native Load Purchases	4/	Fuel Adjus	tment Clause 5/		
		MWh	\$	\$/MWh	MWh	\$	\$/MWh	MWh	\$	\$/MWh	\$	MWh	\$	\$/MWh	MWh	\$	\$/MWh	
	_	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	
	October 2022																	
11	01 - 01	28,371.572	1,025,231.20	36.14	28,371.572	115,724.82	4.08	28,371.572	1,140,956.02	40.21	(5,137,368.75)	34,314.599	1,749,636.26	50.99	62,686.171	(2,246,776.48)	(,	11
12	02 - 08	223,897.964	8,277,197.80	36.97	223,897.964	994,049.34	4.44	223,897.964	9,271,247.14		(1,218,803.38)	260,991.737	16,853,098.63	64.57	484,889.701	24,905,542.39	51.36	12
13 14	09 - 15	200,790.405	7,177,429.63	35.75	200,790.405	1,342,103.87	6.68	200,790.405	8,519,533.50	42.43	(2,317,926.34)	305,904.052	19,972,910.78	65.29	506,694.457	26,174,517.94	51.66 47.59	13
15	16 - 22 23 - 29	298,267.821 312,968.221	10,138,042.93 10,887,412.27	33.99 34.79	298,267.821 312,968.221	1,905,459.57 2,351,260.72	6.39 7.51	298,267.821 312,968.221	12,043,502.50 13,238,672.99	40.38 42.30	(1,504,195.62) (2,316,918.51)	246,926.926 200,233.620	15,407,238.10 12,017,944.93	62.40 60.02	545,194.747 513,201.841	25,946,544.98 22,939,699.41	44.70	14 15
16	23 - 29 30 - 31	101.434.104	3.752.714.79	37.00	101.434.104	71.954.00	0.71	101.434.104	3.824.668.79		(321,996.00)	37.242.970	1,985,626.20	53.32	138.677.074	5.488.298.99	39.58	16
17	Subtotals	1,165,730.087	41,258,028.62	35.39	1,165,730.087	6.780.552.32	5.82	1,165,730.087	48,038,580.94	41.21	(12,817,208.60)	1,085,613.904	67.986.454.90	62.62	2.251.343.991	103,207,827.24	45.84	17
.,	Cubicidis	1,100,100.001	41,200,020.02	00.00	1,100,700.007	0,700,002.02	0.02	1,100,700.007	40,000,000.04	71.21	(12,017,200.00)	1,000,010.004	07,000,404.00	02.02	2,201,040.001	100,201,021.24	40.04	.,
18													WVPA-IMPA	Adjustment 6/	(283,438.344)	(11,728,969.31)	41.38	18
19												Native /	Alloc. Of Gas Pipeline		(200,400.044)	314.294.58	41.00	19
20													Other Fuel Cos	t Adustments		-		20
21														_	1,967,905.647	91,793,152.51	46.65	21
	_													=			■	
							_				Other MISO Charges				_			
			DEI Generation Fuel			Charges Correspond to Serve DEI Native	· ·		eration Total Expense DEI Native Load		and/or Credits Allocated	Tetal DELI	Native Load Purchases	41		otal Via ment Clause 5/		
		MWh	for DEI Native Load 1 \$	<u>1/_</u> \$/MWh	MWh	\$	\$/MWh	MWh	\$	\$/MWh	to DEI Native Load 3/ \$	MWh	\$	\$/MWh	MWh	\$	\$/MWh	
	L	(A)	(B)	(C)	(D)	(E)	(F)	(G)	Ψ (H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	
	November 2022	(1)	(0)	(0)	(0)	(=)	(,)	(0)	(1.7)	(-)	(0)	(14)	(5)	(11)	(14)	(0)	()	
22	01 - 05	196,920.974	6,255,093.74	31.76	196,920.974	357,670.41	1.82	196,920.974	6,612,764.15	33.58	(4,654,957.60)	153,596.904	7,162,871.03	46.63	350,517.878	9,120,677.58	26.02	22
23	06 - 12	315,646.748	10,652,428.36	33.75	315,646.748	477,231.82	1.51	315,646.748	11,129,660.18	35.26	(341,630.82)	155,039.254	6,807,111.80	43.91	470,686.002	17,595,141.16	37.38	23
24	13 - 19	525,884.168	16,884,268.45	32.11	525,884.168	7,622,257.72	14.49	525,884.168	24,506,526.17	46.60	(5,133,927.62)	92,932.541	7,468,639.69	80.37	618,816.709	26,841,238.24	43.38	24
25	20 - 26	417,867.617	12,756,116.78	30.53	417,867.617	5,715,655.90	13.68	417,867.617	18,471,772.68	44.20	(4,373,605.30)	131,223.537	8,837,855.76	67.35	549,091.154	22,936,023.14	41.77	25
26	27 - 30	173,107.374	5,198,528.41	30.03	173,107.374	2,011,180.37	11.62	173,107.374	7,209,708.78	_	(2,727,572.49)	150,507.311	10,447,713.54	69.42	323,614.685	14,929,849.83	46.13	26
27	Subtotals	1,629,426.881	51,746,435.74	31.76	1,629,426.881	16,183,996.22	9.93	1,629,426.881	67,930,431.96	41.69	(17,231,693.83)	683,299.547	40,724,191.82	59.60	2,312,726.428	91,422,929.95	39.53	27
													140/54 1145	A P	(044 000 000	(0.000.000.00	00.10	
28												Ni. C.	WVPA-IMPA	•	(214,885.276)	(6,966,686.05)	32.42	28
29 30												Native /	Alloc. Of Gas Pipeline Other Fuel Cost A			296,749.98 (6.787.428.58)		29 30
30													Other Fuel Cost A	nuusiiileilis 8/ _	2,097,841.152	77.965.565.30	37.16	30
01														=	2,007,071.102	. 1,000,000.00	= 070	01

Notes:

The net fuel costs are based on results of the Sumatra computer modeling process using the most current MISO statements available. They will be adjusted in future periods, as needed, based on revised MISO statements and new Sumatra modeling results ("Sumatra adjustments").

- 1/ Includes the Markland run-of-river hydroelectric generation and Crane solar generation.
- 2/ Includes the MISO Congestion and Loss components of LMP for generation and purchases allocated to serve native load and offsets to revenue for generating unit off-line auxiliary power (i.e., generation revenues from MISO less corresponding load expense to MISO). Includes (\$118,746.19), (\$5,714.33) and (\$5,434.00) respectively, for Excessive Energy Amounts for the months of September 2022, October 2022, November 2022.
- 3/ Includes multiple MISO related charges and credits. See Attachment A, Schedule 11 for additional detail.
- 4/ Includes net purchased power for DEI native load in excess of DEI generation allocated by Sumatra to serve native load (e.g. Benton County Wind PPA, MISO purchased power, and Bilateral purchased power). In accordance with the Commission's July 29, 2020 Order in Cause No. 45253, the purchased power benchmark process was eliminated for periods after the date of the rate order.
- 5/ Does not include Sumatra adjustments of prior period costs recognized in the current period or third party transmission activity.
- 6/ Manual exclusion of fuel cost associated with WVPA and IMPA's joint ownership of Gibson unit 5, necessary because Sumatra models and allocates cost to 100% of Gibson 5.
- 7/ DEI native load allocation of gas pipeline reservation fees. The fees are allocated based on the percentage of generation from pipeline reservation cost assessed units assigned to native load versus total generation output of these units.
- 8/ Native allocation of annual aerial fuel adjustment.

Actual Native Load Cost of Fuel to Generate Electricity and the Actual Native Load Cost of Fuel Included in the Cost of Purchased Power December 2021 through November 2022

Line														Line
No.	Description	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	No.
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	
1	MWh Sales (S)	2,394,471	2,726,838	2,525,816	2,279,303	2,413,377	2,243,184	2,744,483	2,765,529	3,010,836	2,643,634	2,143,415	2,206,768	1
2	Fuel Cost (F) Native Load Fuel Cost	\$ 94,800,355	\$ 118,299,776	\$ 91,823,499	\$ 100,741,729	\$ 118,693,849	\$ 135,086,424	\$ 154,931,063	\$ 158,879,404	\$ 185,939,722	\$ 146,790,130	\$ 102,351,337	\$ 84,591,546	2
3	Realized Hedging Activity	24,481,610	6,765,024	4,461,654	192,397	(3,992,487)	(12,636,327)	(16,906,711)	(3,658,687)	(6,250,763)	3,810,710	9,044,074	11,418,081	3
4	Other Adjustments	(357,235)	-	(765,521)	11,819	(13,581)	309	13,770	-	(349,992)	(227,731)	(152,417)	(555,041)	4
5	Prior Period Cost Adjustments 1/	3,176,810			(1,770,738)			(2,089,798)			(5,921,580)			5
6	Total Fuel Cost (F)	\$ 122,101,540	\$ 125,064,800	\$ 95,519,632	\$ 99,175,207	\$ 114,687,781	\$ 122,450,406	\$ 135,948,324	\$ 155,220,717	\$ 179,338,967	\$ 144,451,529	\$ 111,242,994	\$ 95,454,586	6
7	Fuel Cost Per kWh (Mills) F/S	\$ 50.993	\$ 45.864	\$ 37.817	\$ 43.511	\$ 47.522	\$ 54.588	\$ 49.535	\$ 56.127	\$ 59.565	\$ 54.641	\$ 51.900	\$ 43.255	7
	Fuel Cost Factor Restated Based On Synchronization of Sumatra Adjustments													
8 9	Remove: Prior Period Sumatra Adjustments Reflected in the Current Month Remove: Hedging and Other Fuel Adjustments	3,176,810 24,124,375	- 6,765,024	3,696,133	(1,770,738) 204,216	(4,006,068)	(12,636,018)	(2,089,798) (16,892,941)	(3,658,687)	(6,600,755)	(5,921,580) 3,582,979	- 8,891,657	10,863,040	8
10	Add: Subsequent Sumatra Adjustments that Pertain to the Month Presented		(685,384)	(769,587)	(552,717)	(498,768)	(1,041,905)	(892,744)	(2,624,982)	(2,403,854)		-	-	
11	Restated Total Fuel Costs	\$ 94,488,180	\$ 117,614,392	\$ 91,053,912	\$ 100,189,012	\$ 118,195,081	\$ 134,044,519	\$ 154,038,319	\$ 156,254,422	\$ 183,535,868	\$ 146,790,130	\$ 102,351,337	\$ 84,591,546	11
12	Fuel Cost Factor	39.461	43.132	36.049	43.956	48.975	59.756	56.127	56.501	60.958	55.526	47.752	38.333	12
13	Percentage Variance from Preliminary Fuel Cost (Ln. 6) to Adjusted Fuel Cost, Excluding Hedging and Other Adjustments (Ln. 11)	(22.62 %)	(5.96 %)	(4.68 %)	1.02 %	3.06 %	9.47 %	13.31 %	0.67 %	2.34 %	1.62 %	(7.99 %)	(11.38 %)	13

 $[\]underline{1}$ / Prior period adjustments reflect the allocation of operating company fuel expense and purchase power costs for certain prior months based on the results of the Sumatra model.

Actual Fuel Cost Per kWh Compared to Estimated Fuel Cost Per kWh for the Months of September, October and November 2022

Line		Septembe	r 2022	October	2022	Novemb	er 2022	Tota	al	Line
No.	Description	Actual	Forecast	Actual	Forecast	Actual	Forecast	Actual	Forecast	No.
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
	MWh Source:	(^)	(6)	(0)	(D)	(L)	(1)	(G)	(11)	
	Native Load Sales									
	Retail									
1	Residential	776,573	784,363	504,662	542,178	543,773	551,339	1,825,008	1,877,880	1
2	Commercial	641,354	578,240	713,289	481,762	446,966	453,028	1,801,609	1,513,030	2
3	Industrial	1,009,190	874,309	245,245	829,956	791,902	813,104	2,046,337	2,517,369	3
4	Public Street and Highway Lighting	6,020	4,164	5,942	4,189	5,502	4,230	17,464	12,583	4
5	Other Public Authorities	190,928	183,989	561,836	161,758	137,838	155,451	890,602	501,198	5
6	Total Billed Sales	2,624,065	2,425,065	2,030,974	2,019,843	1,925,981	1,977,152	6,581,020	6,422,060	6
7	Unbilled Retail Sales	(269,349)	(227,286)	(104,599)	49,956	118,158	129,907	(255,790)	(47,423)	7
8	Wholesale Sales	288,918	298,056	217,040	305,677	162,629	317,782	668,587	921,515	8
9	Total Native Load Sales (S)	2,643,634	2,495,835	2,143,415	2,375,476	2,206,768	2,424,841	6,993,817	7,296,152	9
40	Fuel Cost: Native Load Fuel Cost	\$ 146 790 130		Ф 400 054 007 I	Ф 427 222 000	Ф 04 504 54C	A 100 005 000	222 722 042	440 707 040	40
10	Native Load Fuel Cost	\$ 146,790,130	\$ 137,580,040	\$ 102,351,337	\$ 137,332,000	\$ 84,591,546	\$ 138,885,000	333,733,013	413,797,040	10
11	Hedging Activity and Other Adjustments	3,582,979	(2,426,700)	8,891,657	(375,720)	10,863,040	790,313	23,337,676	(2,012,107)	11
12	Total Fuel Cost	150,373,109	135,153,340	111,242,994	136,956,280	95,454,586	139,675,313	357,070,689	411,784,933	12
13	Fuel Cost - Mills Per kWh Before Prior Period									
	Adjustment (F/S)	<u>\$ 56.881</u>	<u>\$ 54.152</u>	<u>\$ 51.900</u>	\$ <u>57.654</u>	<u>\$ 43.255</u>	<u>\$ 57.602</u>	<u>\$ 51.055</u>	<u>\$ 56.439</u>	13
14	Percentage (%) Actual is Over (Under) Estimate Before Prior Period Adjustments	5.04	%	(9.98	%)	(24.9	1 %)	(9.54	%)	14
	•			(,	,	,	,	,	
15	Prior Period Cost Adjustments	(5,921,580)		-	<u>-</u>	-		(5,921,580)		15
16	Total Fuel Cost (F ₁)	<u>\$ 144,451,529</u>	\$ 135,153,340	<u>\$ 111,242,994</u>	\$ 136,956,280	<u>\$ 95,454,586</u>	\$ 139,675,313	\$ 351,149,109	<u>\$ 411,784,933</u>	16
17	Fuel Cost - Mills Per kWh After Prior Period Adjustment (F1/S)	\$ 54.641	<u>\$ 54.152</u>	\$ 51.900 S	\$ <u>57.654</u>	\$ 43.25 <u>5</u>	<u>\$ 57.602</u>	\$ 50.209	\$ 56.439	17
18	Percentage (%) Actual is Over (Under) Estimate After Prior Period Adiustments	0.90	%	(9.98	%)	(24.9	1 %)	(11.04	ł %)	18

Other MISO/PJM Charges/(Credits) Allocated to Native Load Customers

Line No.	MISO/PJM Charge Description	cXL - MISO/PJM Charge Descripton	September-22	October-22	November-22	
1	DA Congestion Rebate on Carve-Out Grandfathered Agrmnts	DA Cong Rebate CO		•	\$ -	
2	DA Congestion Rebate on Option B Grandfathered Agrmnts	DA Cong Rebate Opt B		T	\$ -	
3	DA Financial Bilateral Transaction Congestion Amount	DA Fin Bilateral Con			\$ -	
4	DA Financial Bilateral Transaction Loss Amount	DA Fin Bilateral Los			\$ -	
5	DA Losses Rebate on Carve-Out Grandfathered Agrmnts	DA Loss Rebate CO		•	\$ -	
6	DA Losses Rebate on Option B Grandfathered Agrmnts	DA Loss Rebate Opt B		•	-	
7	DA Revenue Sufficiency Guarantee Make Whole Payment Amount	MISO DA RSG MKWHL	\$ (97,527.73)	the state of the s	\$ (811.00)	1
8	DA Virtual Energy Amount	DA Virtual	\$ -		\$ -	
9	FTR Hourly Allocation Amount	FTR	\$ (2,478,069.92)		\$ (11,382,292.63)	
10	FTR Monthly Allocation Amount	MISO FTR MTH ALLOC	\$ (12,845.55)	the state of the s	5 S S S S S S S S S S S S S S S S S S S	1
11	FTR Transaction Amount	MISO FTR Transaction			-	
12	FTR Yearly Allocation Amount	MISO FTR YRLY ALLOC			\$ -	
13	RT Congestion Rebate on Carve-Out Grandfathered Agrmnts	RT Cong Rebate CO			\$ -	
4	RT Congestion Rebate on Option B Grandfathered Agrmnts	RT Cong Rebate Opt B	**************************************	•	\$ -	
5	RT Distribution of Losses Amount	MISO RT LOSSES	\$ (2,849,012.39)	the state of the s	the state of the s	1
16	RT Financial Bilateral Transaction Congestion Amount	RT Fin Bilateral Con	*		\$ -	
17	RT Financial Bilateral Transaction Loss Amount	RT Fin Bilateral Los	•	•	\$ -	
8	RT Losses Rebate on Carve-Out Grandfathered Agrmnts	RT Loss Rebate CO	•	•	\$ -	
9	RT Loss Rebate on Option B Grandfathered Agrmnts	RT Loss Rebate Opt B	T	*	\$ -	
0	RT Net Inadvertent Distribution Amount	MISO RT NAD	\$ (10,997.28)			
1	RT Revenue Sufficiency Guarantee Make Whole Payment Amount	MISO RT RSG MKWHL	\$ (338,487.08)	\$ (146,151.76)	\$ (209,338.76)	1
2	Contingency Reserve Deployment Failure Charge Uplift Amount	RT Contingency Reserve Deployment Failure Charge Uplift Amount		\$ - :	\$ -	
:3	RT Virtual Energy Amount	RT Virtual	\$ - :	\$ - :	\$ -	
4	GFA (part of DA and RT Asset Energy)	GFA (part of DA and RT Asset Energy)	\$ - :	\$ - :	\$ -	
5	FTR Shortfall	MISO FTR Shortfall	\$ 12,840.97	\$ 154,564.71	\$ 79,576.32	
6	RNU CRDFC Uplift Component	RNU CRDFC Uplift Component	\$ (2,911.11)	\$ (856.11)	\$ -	
7	FTR Full Funding Guarantee Amount	MISO FTR Full Fd Guar	\$ -	\$ -	\$ -	
3	FTR Guarantee Uplift Amount	MISO FTR Guar Uplift	\$ -	\$ - :	\$ -	
9	Auction Revenue Rights Stage 2 Distribution Amount	MISO FTR ARR Stage 2	\$ (120,125.95)	\$ (120,791.30)	\$ (120,581.56))
0	RT Price Volatility Make Whole Payment	MISO RT VOL MKWHL	\$ (1,183,943.73)	\$ (992,319.16)	\$ (348,632.21)	,
1	DA Revenue Sufficiency Guarantee Distribution Amount	MISO DA RSG Dist Amt	\$ 92.003.52			
2	RT Revenue Sufficiency Guarantee First Pass Distribution Amount	MISO RT RSG 1st Pass	\$ 70,259.81	\$ 58,808.53		
3	Net Regulation Adjustment Amount	MISO Net Reg Adj Amt	\$ 2,855.99			
1	Regulation Cost Distribution Amount	MISO Reg Dist	\$ 108,144.24			
5	Spinning Reserve Cost Distribution Amount	MISO Spin Dist	\$ 82,194.22			
3	Supplemental Reserve Cost Distribution Amount	MISO Supp Dist	\$ 14,292.77			
,	RT Excessive/Deficient Energy Deployment Charge Amount	MISO Reg Penalty	\$ 102,878.44			
3	DA Regulation Amount	DA Regulation	\$ (174,864.52)			
)	DA Spinning Reserve Amount	DA Spinning	\$ (79,966.21)	the state of the s		
)	RT Regulation Amount	MISO RT Regulation	\$ (230,471.59)			
	RT Spinning Reserve Amount	MISO RT Spinning	\$ (72,899.35)			
<u>2</u>	RT Supplemental Reserve Amount	MISO RT Supplemental	\$ (208.07)			
3	DA Supplemental Reserve Amount	DA Supplemental			\$ -	
1	Auction Revenue Rights Infeasible Uplift Amount	MISO infesbl ARR UP	\$ 146,846.80		•	
5	Contingency Reserve Deployment Failure Charge Amount	Contingency Reserve Deployment Failure Charge Amount			\$ -	
6	FTR Monthly Transaction Amount	FTR Monthly Transaction Amount	*	•	\$ -	
7	FTR Annual Transaction Amount	MISO FTR YRLY TX AMT	\$ 7,158,418.62	•	•	
;	Auction Revenue Rights Transaction Amount	MISO ARR Revenues		\$ (12,282,730.99)		
)	MISO DR Alloc Uplift	MISO DR Alloc Uplift	\$ 0.01		\$ -	
	MISO Misc Round Adj	MISO Misc/Round Adj	\$ 320,412.83			
	Internal Charge Type Related to MISO RT Regulation	MISO RT MIL MWP	\$ (19,303.62)			
	Internal Charge Type Related to MISO RT Regulation	MISO Reg MIL UNDP	\$ 54,362.38			
	MISO Disputed Amount	MISO Disputed Amount			\$ 47,371.27 \$ -	
	RT Ramp Capability	RT Ramp Capability	\$ (11,304.28)		•	
			\$ (11,304.28) \$ \$ (3,330.97) \$	5 S S S S S S S S S S S S S S S S S S S		
	DA Ramp Capability	DA Ramp Capability	(-7/	the state of the s		
	Madison PJM Charges	Madison PJM Charges	The state of the s			
7	Battery Charges	Native Battery MISO Charges	\$ (7,409.30)			
8	Short-Term Reserve Cost Distribution Amount	MISO ST Res Dist Amt	\$ 25,679.09 \$ (10.314.64) \$			
9	Real-Time Short-Term Reserve Amount	MISO ST Reserve Amt				
0	Day-Ahead Short-Term Reserve Amount	DA ST Reserve	\$ (6,057.58)	\$ (14,387.35)	\$ (9,235.38	;)

Determination of International Paper
Fuel Cost Adjustment Factor Based on Estimated Average Fuel Costs
for the Months of April, May, and June 2023

								Estimated		
Line	_		Es	stimated Month o	f:		_	Three-Month	Source	Line
No.	<u>Description</u>	April 2023		May 2023		June 2023	Total	Average	ATTACHMENT A	No.
	*****	(A)		(B)		(C)	(D)	(E)		
	MWh Source:	4 000 000		4 0 4 4 0 7 0		4 0 4 4 4 4	4.070.474	4.057.004		
1	Steam Generation	1,088,093		1,344,270		1,641,111	4,073,474		Sch. 2, Line 7	1
2	Nuclear Generation	-		-		-	-		Sch. 2, Line 8	2
3	Hydro and Solar Generation	41,809		43,495		42,372	127,676	42,559	Sch. 2, Line 9	3
	Other Generation									
4	Internal Combustion			-					Sch. 2, Line 10	4
5	Gas Combustion Turbine	360,996		334,910		385,216	1,081,122		Sch. 2, Line 11	5
6	Integrated Gasification Combined Cycle	338,952		360,678		418,392	1,118,022		Sch. 2, Line 12	6
7	Purchased Power	506,434		411,928		246,490	1,164,852		Sch 3, Col. A	7
8	Equivalent kWh - Steam Sale Less:	12,675		12,691		11,582	36,948	12,316	Sch. 5, Line 2	8
9	Intersystem Sales		_	<u> </u>					Sch. 4, Col. A	9
10	Total kWh (K)	2,348,959		2,507,972		2,745,163	7,602,094	2,534,031		10
	Fuel Cost:									
11	Steam Generation	\$ 34,128,000	\$	42,495,000	\$	52,858,000	\$ 129,481,000	\$ 43,160,333	Sch. 2, Line 1	11
12	Nuclear Generation	-		-		-	-	-	Sch. 2, Line 2	12
13	Hydro and Solar Generation	-		-		-	-	-		13
	Other Generation									
14	Internal Combustion	-		-		-	-	-	Sch. 2, Line 3	14
15	Gas Combustion Turbine	15,651,000		13,090,000		14,488,000	43,229,000	14,409,667	Sch. 2, Line 4	15
16	Integrated Gasification Combined Cycle	9,080,000		9,713,000		13,088,000	31,881,000	10,627,000	Sch. 2, Line 5	16
17	Hedging Position	4,845,820		2,263,279		1,774,478	8,883,577	2,961,192	Sch. 1, Line 17	17
18	Purchased Power	24,495,000		19,937,000		11,881,000	56,313,000	18,771,000	Sch 3, Col. C	18
19	Net MISO Energy Market	587,000		526,000		1,518,000	2,631,000	877,000	Sch. 1, Line 19	19
20	Net MISO Ancillary Services Market	-		-		-	-	-	Sch. 1, Line 20	20
	Less:									
21	Intersystem Sales		-			-			Sch. 4, Col. C	21
22	Total Fuel Cost (F)	\$ 88,786,820	\$	88,024,279	\$	95,607,478	\$ 272,418,577	\$ 90,806,192		22
23	F / K (Mills Per kWh)							35.8346808		23
24	Equivalent Cost Per 1000 lbs Steam (Line 23 * 0.1084)							3.8844794		24
25	Less: Base Cost of Fuel Included in Rates Per 1000 lbs S	iteam						2.9219220		25
26	Fuel Cost Adjustment Factor Per 1000 lbs Steam							0.9625574	=	26

Reconciliation of Actual Fuel Cost Incurred to Fuel Cost Billed to International Paper For the Months of September through November 2022

Line No.	Month	Steam Supplied (lbs.)	Actual Fuel Cost Adjustment Factor <u>1</u> /	Estimated Fuel Cost Adjustment Factor	Variance	Reconciliation Amount	Line No.
1	September 2022	81,729,691	4.4399030	3.4255032	1.0143998	82,907	1
2	October 2022	107,084,770	3.6594464	4.2369937	(0.5775473)	(61,847)	2
3	November 2022	104,115,010	2.7589715	4.2369937	(1.4780222)	(153,884)	3
4	TOTAL RECONCILIATION					\$ (132,824)	4

1/ Detailed below are determinants of the actual cost figures represented above.

	Se	otember 2022	C	October 2022	No	vember 2022
MWh Sales (K)		2,297,818		2,072,909		2,212,244
Fuel Cost (F)	\$	127,798,340	\$	100,365,020	\$	88,734,237
F/K (Mills Per kWh)		55.6172595		48.4174752		40.1105109
Equivalent Cost per 1000lbs Steam		6.0289109		5.2484543		4.3479794
Less: Base Cost of Fuel Included in Rates		1.5890079		1.5890079		1.5890079
Fuel Cost Charge Factor (Per 1000lbs Steam)		4.4399030		3.6594464		2.7589715