

STATE OF INDIANA

FILED
September 1, 2022
INDIANA UTILITY
REGULATORY COMMISSION

INDIANA UTILITY REGULATORY COMMISSION

APPLICATION OF DUKE ENERGY INDIANA, LLC)	
FOR APPROVAL OF A CHANGE IN ITS FUEL COST)	
ADJUSTMENT FOR ELECTRIC SERVICE AND FOR)	
APPROVAL OF A CHANGE IN ITS FUEL COST)	
ADJUSTMENT FOR HIGH PRESSURE STEAM)	CAUSE NO. 38707
SERVICE, IN ACCORDANCE WITH INDIANA CODE)	FAC-1₿RC
§8-1-2-42, INDIANA CODE §8-1-2-42.3 AND VARIOUS)	
ORDERS OF THE INDIANA UTILITY)	PUBLIC'S
REGULATORY COMMISSION)	EXHIBIT NO.
	9-19-22 REPORTER
	DAIL

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

PUBLIC'S EXHIBIT NO. 2

TESTIMONY OF OUCC WITNESS MICHAEL D. ECKERT

SEPTEMBER 1, 2022

Lorraine Hitz

Attorney No. 18006-29

Deputy Consumer Counselor

Foriaine Hitz

TESTIMONY OF OUCC WITNESS MICHAEL D. ECKERT CAUSE NO. 38707 FAC-133 <u>DUKE ENERGY INDIANA, LLC.</u>

I. <u>INTRODUCTION</u>

1	Q:	Please state your name, business address and employment capacity.
2	A:	My name is Michael D. Eckert, and my business address is 115 W. Washington St.,
3		Suite 1500 South, Indianapolis, Indiana 46204. I am employed by the Indiana Office of
4		Utility Consumer Counselor ("OUCC") as Director of the Electric Division. My
5		qualifications are set forth in Appendix A of this document.
6 7	Q:	Have you previously testified before the Indiana Utility Regulatory Commission ("Commission")?
8	A:	Yes.
9	Q:	What is the purpose of your testimony?
10	A:	I address Duke Energy Indiana, LLC's ("DEI"): (1) purchased power over the
11		benchmark; (2) Ancillary Services Market ("ASM") Order; (3) hedging transactions;
12		(4) monthly average regulation, spinning, and supplemental reserves; (5) Benton
13		County Wind Farm ("Benton County); (6) coal inventory; (7) coal
14		increment/decrement pricing; (8) coal inventory impacts; (9) bill analysis; (10) actual
15		cost of fuel (Mills/kWh) comparison; (11) net operating income analysis; and (12)
16		commitment status. Ultimately, the OUCC recommends the Commission require
17		DEI to provide the actual and forecasted 2022-23 projected coal burns; the inputs to
18		its calculation of the coal price increment/decrement; reasons for any use of
19		increment/decrement pricing, and to update the Commission in its next FAC filing
20		on its coal inventory and transportation situation (as further described in my

1		testimony below). The OUCC further recommends the Commission approve the
2		OUCC's revisions to DEI's proposed fuel cost factors as recalculated by OUCC
3		witness Gregory T. Guerrettaz. The revised factor will spread out DEI's "current"
4		large variance over a period of four (4) quarters, rather than two (2) quarters.
5 6	Q:	Is this the first time the OUCC has requested that the Commission spread DEI's variance over four FAC periods?
7	A:	No. The OUCC previously requested DEI's variance be spread over four periods in
8		Duke's FAC 132 proceeding, but the Commission denied that request.
9 10 11	Q:	Given that the Commission has previously denied the OUCC's request to spread the variance over four FAC periods in FAC 132, why is the OUCC again asking for this relief?
12	A:	The OUCC respectfully requests that the Commission reconsider its denial when
13		assessing the impact of variance in this FAC. The OUCC is aware that increasing
14		electricity prices are already negatively impacting ratepayers and seeks this relief to
15		mitigate the impact of DEI's large variance by spreading it over four FAC periods.
16		While this may have the effect of lengthening the period of DEI's recovery, the
17		OUCC is concerned that absent this relief, customers will be burdened by extremely
18		large bills.
19 20	Q:	To the extent you do not address a specific item in your testimony, should it be construed to mean you agree with Petitioners' proposals?
21	A:	No. My silence on any topics, issues, or items Petitioner proposes does not indicate
22		my approval of these topics, issues, or items. Rather, the scope of my testimony is
23		limited to the specific topics discussed herein.
24 25	Q:	Please describe the review and analysis you conducted in order to prepare your testimony.
26	A:	I read DEI's prefiled testimony and petition in this proceeding as well as relevant

1 Commission Orders. I reviewed DEI's workpapers and responses to the OUCC's 2 data requests, pertinent sections of Title 8 of Indiana Code, and Title 170 of the 3 Indiana Administrative Code. Additionally, the OUCC performed its field audit 4 remotely via conference call and Microsoft Teams on Friday August 19, 2022 and 5 Thursday, August 25, 2022. I also participated in meetings with other OUCC staff 6 members and DEI personnel in developing issues identified in this Cause. II. ANCILLARY SERVICES MARKET Does DEI's treatment of ASM charges follow the treatment ordered by the O: 8 Commission in its Phase II Order in Cause No. 43426, dated June 30, 2009? 9 A: Yes. III. **HEDGING TRANSACTIONS** 10 Do you have any concerns related to hedging transactions in this FAC? Q: 11 A: Yes. DEI incurred a large hedging loss of \$16,424,598. Mr. Guerrettaz's testimony 12 provides more information and analysis on the hedging transactions. 13 Q: How were DEI's hedging programs impacted by coal supply issues? 14 A: In 2021, DEI began experiencing coal supply and coal transportation issues, while 15 natural gas and power prices were increasing significantly, and those prices still 16 remain high. Thus, DEI's coal units were deliberately priced higher going into the 17 MISO market because DEI implemented a coal "adder" (or increment) to the unit price. The increment was added because DEI's coal inventories were below target 18

Have you reviewed the purchased power and natural gas hedges since

Yes. I have attached the purchased power and natural gas hedging gains/losses, by

levels due to rail and labor constraints.

December 2013?

19

20

21

22

Q:

A:

1		month for the period December 2013 through May 2022 as Attachment MDE-3. The
2		data shows that in general, hedging gains and losses for the period December 2013
3		through January 2021 were relatively consistent. Beginning in February 2021, DEI
4		experienced its largest hedging gain of \$17,524,071, and with the exception of March
5		2021, continued to experience large gains through November 2021. Then in
6		December 2021, DEI experienced its largest hedging loss ever, followed by its 2 nd
7		and 3 rd largest hedging losses in January 2022 and February 2022. In this FAC period
8		(March 2022 through May 2022), DEI experienced a small loss in March and gains
9		in April and May.
10	Q:	Is DEI currently reviewing its hedging practices?
11	A:	Yes.
12	Q:	Has the OUCC asked DEI to provide the results of its informal review?
13	A:	Yes. The OUCC asked DEI to update the OUCC and Commission on the findings of
14		this internal review and recommends DEI file testimony on the results of this
15		informal review in its next FAC.

IV. REGULATION, SPINNING, AND SUPPLEMENTAL RESERVES **CHARGES**

16 17 18	Q:	Did DEI report the monthly average ASM cost distribution amounts for regulation, spinning, and supplemental reserves it paid for each of the ancillary service products?
19	A:	Yes. Per the Commission's Order, 1 DEI reported 2 the average monthly ASM cost
20		distribution amounts for regulation, spinning, and supplemental reserves charge
21		types.

 $^{^{\}rm 1}$ See the Commission's Order in Cause No. 43426, Phase II, p. 41. $^{\rm 2}$ See DEI Witness Scott Burnside's testimony, p. 7.

V. <u>BENTON COUNTY WIND FARM</u>

- 1 Q: Were there any new developments related to the Benton County Wind Farm?
- 2 A: No.

VI. COAL INVENTORY

- 3 Q: How has DEI's coal inventory changed since its last FAC petition?
- 4 A: DEI witness Brett Phipps³ testified that since February 28, 2022, DEI's coal
- 5 inventory at its generating stations has increased from approximately 1,561,002 tons
- 6 (30 days) to 1,961,923 tons (38 days) as of May 31, 2022. DEI's is actively trying to
- 7 maintain a minimum inventory through the next FAC period.⁴
- 8 Q: Why is DEI struggling to maintain its coal supply inventory at target levels?
- 9 A: DEI's coal inventory is below target levels because DEI has experienced coal supply
- and transportation issues over the last year. In addition, projected coal burns for
- 11 calendar year 2021 were significantly lower than the actual coal burn for 2021. This
- occurred because natural gas prices increased significantly during the summer of
- 2021, making coal generation more competitive and/or cheaper than natural gas fired
- 14 generation.
- 15 Q: Did DEI explain its coal supply issues?
- 16 A: Yes. Mr. Phipps confirmed the on-going problems with "significant delivery
- 17 constraints due to labor shortages from COVID-19 and other railroad resource
- constraints which moved the Company's impacted coal deliveries into the future.
- The Company remains concerned and continues to monitor the viability of future

³ On August 9, 2022, DEI filed a motion notifying the Commission that Shawn D. Shultz will adopt the case-in-chief testimony of Brett Phipps.

⁴ See DEI Witness Brett Phipps' testimony, p. 12.

1		supply due to the financial and labor constraints facing its suppliers and rail
2		transportation providers."5
3	Q:	Is DEI actively trying to manage its coal purchases and coal inventory?
4	A:	Yes. DEI indicated through its prefiled testimony and discussions with the OUCC
5		that it is actively looking into options to manage its coal inventory. DEI has been
6		able to secure additional coal for 2022-2023 but is still struggling to acquire and
7		maintain adequate transportation to get the coal to its stations.
8 9	Q:	Is DEI in contact with its coal transportation providers in an attempt to increase transportation (number of trains)?
10	A:	Yes.
11	Q:	Has DEI filed a complaint with the Service Transportation Board?
12	A:	Not to my knowledge.
13	Q:	Has DEI tried to enforce any non-compliance options in its rail contracts?
14	A:	Not to my knowledge.
15	Q:	Does DEI have any coal at its interim coal storage sites or Gallagher Station?
16	A:	Yes. DEI has a total of 166,5466 tons of coal at one interim coal storage site as of
17		May 31, 2022.
18	Q:	How have DEI's coal inventory levels changed since January 2019?
19	A:	The following table depicts DEI's coal inventory levels,7 including interim coal
20		storage sites, since January 2019.

⁵ See Phipps, p. 10. ⁶ See DEI's Witness Mr. Brett Phipps' testimony, page 13-14. ⁷ Amount including interim off-site storage.

Month/Year	Amount (Tons)	Month/Year	Amount (Tons)			
January 2019	2,287,084	November 2020	4,069,248			
February 2019	2,205,048	December 2020	3,816,974			
March 2019	2,388,139	January 2021	3,324,146			
April 2019	2,501786	February 2021	2,740,955			
May 2019	2,775,470	March 2021	2,732,008			
June 2019	2,877,755	April 2021	2,736,182			
July 2019	2,931,160	May 2021	2,655,615			
August 2019	3,014,727	June 2021	2,294,261			
September 2019	3,253,250	July 2021	1,324,997			
October 2019	3,573,122	August 2021	970,858			
November 2019	3,988,798	September 2021	1,208,424			
December 2019	4,349,934	October 2021	1,496,386			
January 2020	4,561,990	November 2021	1,665,175			
February 2020	4,878,345	December 2021	1,946,528			
March 2020	4,902,847	January 2022	1,856,258			
April 2020	5,028,141	February 2022	1,727,549			
May 2020	5,127,370	March 2022	1,932,194			
June 2020	5,324,271	April 2022	2,073,592			
July 2020	5,095,264	May 2022	2,128,469			
August 2020	4,708,754	June 2022	2,038,627			
September 2020	4,455,434	July 2022	1,865,856			
October 2020	4,331,538					

1 Q: Should DEI continue to update the Commission on its coal inventory?

Yes. As ordered by the Commission in Cause No. 38707 FAC-96 and subsequent FAC proceedings, DEI should continue to provide information regarding its coal inventory. DEI should also update the Commission on its 2022 projected coal burn and coal purchases. In addition, DEI should update the Commission on how it is

addressing its coal transportation issues. The OUCC will continue to review and monitor DEI's projected burns and purchases for reasonableness.

VII. COAL INCREMENT PRICING

3 Q: Is DEI utilizing coal supply offer adjustment ("increment") pricing?

4 A: Yes. DEI continued to implement a supply offer adjustment ("increment") on a per

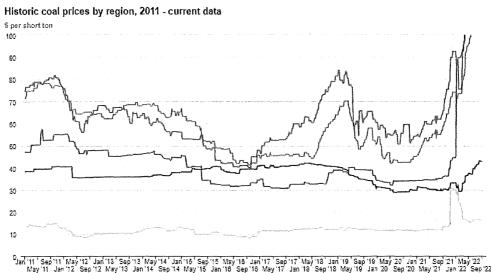
MWh during this FAC period, which was applied to the Gibson and Cayuga Stations.

6 Q: Did coal generation demand increase during the calendar year 2021?

A: Yes. Projected coal burns for calendar year 2021 were significantly lower than the actual coal burn for 2021. This occurred because natural gas prices increased significantly during the summer of 2021, making coal generation more competitive and/or cheaper than natural gas fired generation.

Q: At this same time, did coal prices increase dramatically over the last 12 months?A: Yes. I have enclosed two charts from EIA that shows historical coal prices by region,

by dollars per short ton, and by dollars per mmbtu.



11 Jan 12 Sep 12 May 13 Jan 14 Sep 14 May 16 Jan 16 Sep 16 May 17 Jan 18 Sep 18 May 19 Jan 20 Sep 20 May 21 Jan 22 S — Central Appalachia — Northern Appalachia — Nilinois Basin — Fowder river Basin — Unita Basin

7

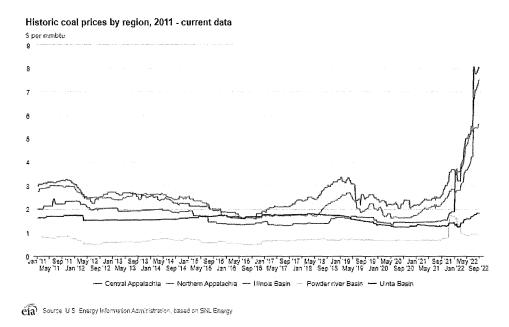
8

9

10

11

12



1 Q: Were coal mines and railroads able to meet the increased coal demand that the electric utilities needed?

3

4

5

6

7

8

10

11

12

13

A:

A:

No. As noted above, coal mines that had previously cut back production during COVID then had trouble increasing production to meet demand. Railroad transportation providers also had trouble increasing service to meet the increased demand. In addition, coal mines and railroads have experienced labor shortage constraints. As a result, several coal mines have sold all their coal for 2021 and/or 2022.

9 Q: Does DEI expect a distressed coal supply chain to continue through 2022?

Yes. Even though DEI has been able to secure additional coal for 2022-2023, it is still struggling to acquire and maintain adequate transportation to get the coal to its stations. Thus, OUCC witness Guerrettaz has additional recommendations regarding this issue.

14 Q: As a result of these coal supply chain issues, has DEI altered its Day-Ahead Offer price?

16 A: Yes. DEI used an increment/adder adjustment to its supply offers to MISO to reduce

1 the dispatch frequency of its coal generation (Gibson and Cayuga). Even though the 2 OUCC does not like the use of a coal increment, the OUCC understands that DEI 3 needed to have a reasonable level of coal inventory for the winter peaking season to 4 meet the reliability concerns in MISO. The increment has the effect of making the 5 offered units more expensive, thus reducing the likelihood that certain units will be 6 "picked up" to run by MISO. 7 Q: Why did DEI use the increment? 8 A: DEI used the increment to deal with the fact that it had a lower-than-average coal 9 inventory. By raising the offer price, DEI's incremented units were less likely to be 10 picked up and coal inventory would not be depleted. DEI wanted to maintain the 11 ability to run the units if needed for reliability during periods of high demand. 12 **Q**: How does use of the coal increment/decrement impact DEI's customers? 13 A: If DEI implements the coal decrement and puts its units into the market below cost, 14 DEI then seeks recovery from customers of the entire cost. If DEI implements the 15 coal increment and puts its units into the market above cost, DEI then seeks recovery 16 from customers of the entire cost. Under either scenario, Duke seeks recovery of the 17 actual cost incurred; under a coal increment, DEI's units run less and under a coal 18 decrement, DEI's units run more. DEI requests recovery of the actual cost of running 19 the unit, not the cost at which DEI put the units into the market. 20 Q: What does the OUCC recommend? 21 A: The OUCC recommends DEI file testimony, schedules, and workpapers to justify 22 any actual need for, or use of, coal increment/decrement pricing in its next FAC 23 filing.

How did DEI's coal inventory issues impact its operations and fuel cost?

24

Q:

1	A:	In addition to implementing a significant fuel increment (adder), DEI's coal
2		inventory issues caused DEI to 1) divert coal from Edwardsport to Cayuga; and 2)
3		increase its hedge position resulting in hedging gains which decreased the cost of
4		fuel.
		VIII. <u>BILL ANALYSIS</u>
5 6 7 8	Q:	Have you calculated the bill impact on a typical residential customer's bill using 500, 1,000, 1,500, and 2,000 kWhs at DEI's proposed rate of \$0.045948 and compared that to the same typical customer's bill using the currently approved rate?
9	A:	Yes, I did, as reflected in the table below.
10 11 12 13		Consumption Dollar Inc/(Dec) 500 \$5.85 1,000 \$11.71 1,500 \$17.56 2,000 \$23.41
14 15 16 17	Q:	Have you calculated the bill impact on a typical residential customer's bill using 500, 1,000, 1,500, and 2,000 kWhs at the OUCC's proposed rate of \$0.041897 and compared that to the same typical customer's bill using the currently approved rate?
18	A:	Yes, I did, as reflected in the table below.
19 20 21 22		Consumption Dollar Inc/(Dec) 500 \$3.83 1,000 \$7.65 1,500 \$11.48 2,000 \$15.31
23	Q:	What assumptions did you make in this calculation?
24	A:	In making this calculation, I did not include any dollar amount for base rates, other
25		trackers, and taxes. Therefore, this calculation reflects only the proposed change to
26		the FAC factor.
27	Q:	Have you provided a calculation of a typical customer's bill using 1,000 kWh in

August 2022, using DEI's online tariffs as of August 31, 2022?

28

1 A: Yes. See Attachment MDE-2. A typical residential customer using 1,000 kWh in
2 August 2022 will pay \$162.60 excluding taxes. This amount consists of \$130.99 in
3 base charges that were set in DEI's last rate case (Cause No. 45253), \$34.24 in fuel
4 adjustment clause charges, and (\$2.63) in non-FAC trackers and riders.

IX. <u>ACTUAL COST OF FUEL (MILLS/KWH) COMPARISON</u>

- Did you do a comparison of the actual monthly cost of fuel (Mills/kWh) for the five large Indiana investor owned utilities ("IOUs")?
- 7 A: Yes. I did. DEI's actual cost of fuel is higher than the other IOUs in the State of Indiana (See Attachment MDE-I).

X. NET OPERATING INCOME ANALYSIS

9 Q: Have you reviewed DEI's calculation of the authorized net operating income 10 amount for earnings test purposes? 11 A: Yes, I have. DEI calculates its authorized net operating income for earnings test 12 purposes by adding the authorized jurisdictional return on fair value and original cost 13 depreciated rate base to the tracked amounts attributable to its Construction Work in 14 Progress ("CWIP"), Environmental Compliance Rider ("ECR") and Renewable Energy Projects ("REP") projects. The table below reflects DEI's calculation of the 15 16 authorized net operating income for earnings test purposes.

Proceeding	Earnings Amount	Phase-In Total			
45253 Base Rate Case Phase 18	\$568,728,000	\$95,034,000			
45253 Base Rate Case Phase 2 ⁹	579,310,000	482,507,000			
42061 ECR-34 ¹⁰	283,000	45,000			
42061 ECR-35 Phase 1 ¹¹	166,000	1,000			

⁸ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 2 of 4, Column C and D.

⁹ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 3 of 4, Columns C and D.

¹⁰ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 2 of 4, Column E and F.

¹¹ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 2 of 4, Column G and H.

42061 ECR-35 Phase 2 ¹²	166,000	75,000
42061 ECR-36 Phase 2 ¹³	83,000	31,000
44932 REP-2 ¹⁴	1,171,000	96,000
44932 REP-3 Phase 1 ¹⁵	1,543,000	131,000
44932 REP-3 Phase 2 ¹⁶	1,543,000	1,285,000
Total (June 1, 2021 through May 31, 2022)		\$579,205,000
Actual Jurisdictional Earned Return ¹⁷		505,690,000
Over-Earning/ (Under-Earning)		(\$73,515,000)

1 Q: Did DEI over-earn during the 12-month period covered by this Petition?

2 A: No. DEI did not over-earn during the 12-month period covered by this Petition.

XI. <u>UNIT COMMITMENT STATUS</u>

- 3 Q: Does the OUCC review DEI's unit commitment status during its FAC audit?
- 4 A: Yes. The OUCC generally reviews DEI's unit commitment status and Mr.
- 5 Guerrettaz's testimony details some of the analysis done by the OUCC during its
- 6 FAC audit. In general, the OUCC's FAC audit process has focused more on the cost
- of fuel and the cost of purchased power.

XII. OUCC RECOMMENDATIONS

- 8 Q: Please summarize your recommendations to the Commission in this cause.
- 9 A: The OUCC recommends the Commission require DEI to provide the following
- 10 information:
- 1) Update the Commission on DEI's current coal inventory situation and 2022-23 projected coal burn and coal purchases;
- 13 2) Update the Commission on the coal transportation issues;

 $^{^{\}rm 12}$ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 3 of 4, Column E and F.

¹³ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 3 of 4, Column G and H.

¹⁴ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 2 of 4, Columns I and J.

¹⁵ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 2 of 4, Columns K and L.

¹⁶ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 3 of 4, Column I and J.

¹⁷ Cause No. 38707 FAC 133, Exhibit 6-B (SES), page 4 of 4, Column D, Line 20.

Public's Exhibit No. 2 Cause No. 38707 FAC-133 Page 14 of 15

1		3) Update the Commission on DEI's coal hedging policy; and
2 3 4		4) As ordered in Cause No. 38707 FAC-96 and subsequent FAC proceedings, continue to provide the inputs to its calculation of and the reasons for any use of the coal price increment/decrement.
5		The OUCC recommends the Commission approve DEI's proposed fuel cost factors,
6		as calculated by Mr. Guerrettaz spreading the current FAC-133 variance over four
7		FAC periods, subject to any further action in this docket.
8	Q:	Does this conclude your testimony?
9	A :	Yes it does

APPENDIX A - QUALIFICATIONS OF MICHAEL D. ECKERT

Q: Please describe your educational background and experience.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A: I graduated from Purdue University in West Lafayette, Indiana in December 1986, with a Bachelor of Science degree, majoring in Accounting. I am licensed in the State of Indiana as a Certified Public Accountant. Upon graduation, I worked as a Field Auditor with the Audit Bureau of Circulation in Schaumburg, Illinois until October 1987. In December 1987, I accepted a position as a Staff Accountant with the OUCC. In May 1995, I was promoted to Principal Accountant and in December 1997, I was promoted to Assistant Chief Accountant. As part of the OUCC's reorganization, I accepted the position of Assistant Director of its Telecommunications Division in July 1999. From January 2000 through May 2000, I was the Acting Director of the Telecommunications Division. During an OUCC reorganization, I accepted a position as a Senior Utility Analyst and in September 2017, I was promoted to Assistant Director of the Electric Division. In February 2022, I was promoted to the Director of the Electric Division. As part of my continuing education, I have attended the National Association of Regulatory Utility Commissioner's ("NARUC") twoweek seminar in Lansing, Michigan. I attended NARUC's Spring 1993 and 1996 seminar on system of accounts. In addition, I attended several CPA sponsored courses and the Institute of Public Utilities Annual Conference in December 1994 and December 2000.

Duke Energy Indiana, LLC Cause No. 38707 FAC - 133

	Carrier No. 28707 FAC - 133 Actual Cost of Fed (MilhAVM) Compartison																						
				r. 40.		5- F F				Ac	tual Cos	of Fuel (Mills	/kWh) Comp	irtion		Indiana		ladim-seti					
Month	Year	Duke Encrysy	FAC	Indiana Michigan Power	PAC #	indianapoli s Power & Light	FAC	NIPSCO	YAC	Constitue South	FAC	Month	Year	Dale Encryy 32,201	FAC #	Michigan Power 19,319	FAC #	s Power & Light	PAC #	NIPSCO	FAC #	ConcePoles South	TAC ×
January February March	Year 2007 2007 2007	Encryy 18:974 20,52n 16:663	72 72 73	12.337 11.853 11.358	59 59 59	18,358 18,436	75 76 76	33,278 26,336	75 75 75	22,609 25,221	75 75 76	October November December	2014 2014 2014	30,849 31,889	103 103 104	20.385 14.991	74 74 75	32,170 33,967 30,310	106 107 107	32.872 31.478 28.582	106 106	28.095 32.155 29.112	106 106 107
April May June	2007 2007 2007	20,748 21,921 17,418	73 73 74	12.022 11.225 11.088	59 59	17,626 17,467 15,589	76 77 77	25,958 30,934 32,563	76 76 76	23.808 22.858 18.872	76 76 77	January February March	2015 2015 2015	30.854 32,468 27,290	104 194 105	17.609 17.573 16.500	75 75 75	32,323 35,110 33,821	107 108 108	27,708 28,799 27,126	197 197 197	29.391 29.554 30.336	107 107 168
July August August September	2007 2007 2007 2007	21.455 26.428 18.147	74 74 75	11.943 12.454 13.895	60 60	17.772 21.676 18.446	77 78 78	35.423 35,433 26,007	77 77	24,456 29,769 28,897 22,298	77 77 77 87	April Mav June	2015 2015 2015	28,062 29,738 28,414	105 105 106	20.400 16.635 21,881	75 75 76	31,806 32,544 32,135	10-9 10-9 10-8	26.642 30.907 29,840	10% 10% 10%	30.921 28.615 28.365	108 109
Detaber November December	2007 2007 2007	21,620 16,620 18,545	75 75 76	14.564 13.773 11.834	60	21,142 17,260 17,212	78 79 79	24,368 24,781 40,363	78 78 78	25,574 19,199 23,509	78 78 79	July August September	2015 2015 2015	27,835 26,964 25,864	106 106 107	21,461 16,383 13,252	76 76 76	29,603 30,582 32,514	169 110 110	30,308 29,217 27,402	109 109	27,887 26,355 27,100	169 169 10
January February March	2008 2008 2008	21,946 22,933 29,699	76 76 77	12.15a 13.413 14.311	61 61	18,146 18,902 19,380	79 80 80	28.307 32.597 33.271	79 79 74	23,349 25,213 27,944	79 79 No	October November December	2015 2015 2015	24,907 25,149 24,158	107 107 108	16,624 15,709 15,995	76 76 77	33,759 33,194 33,830	116 111 111	29,667 29,507 25,701	110 110 110	29,740 30,239 29,121	110 110 111
April May June	2008 2008 2006	24,034 20,159 30,286	77 77 78	16.399 14.682 15.185	61 61 62	18,572 16,360 23,130	80 81 81	28.639 28.679 33.815	50 HI KI	27.651 21.578 32.326	80 81	January February March	2016 2016 2016	76,742 25,444 21,266	108 108 109	16,819 15,968 14,427	77 77 77	31,011 31,384 31,872	111 112 112	28,694 27,173 28,645	111 111 111	29.836 30.855 30.488	111 111 112
July August September	2008 2008 2008	25,2% 25,728 24,964	7% 78 79	15.5±9 17.520 16.509	62 62 62	24,171 20,497 20,028	81 82 82	32,511 28,751 28,292	81 81 83	26,389 23,701 25,788	81 81 1/2	April May June	2016 2016 2016	26.465 25.192 29.079	109 109 110	20,311 14,554 15,382	77 77 78	34,113 31,826 32,695	112 113 113	29,993 27,882 29,012	112 112 112	29,956 28,771 28,265	112 112 113
October November December	2008 2008 2008	24,546 24,389 23,936	79 79 140	20.783 20.375 18.696	62 62 63	20,981 19,596 19,337	82 83 83	26,998 23,261 25,457	82 82 82	29,726 22,083 31,687	82 82 K3	July August Scotember	2016 2016 2016	27.782 27.651 27.641	110 110 111	18,104 16,533 15,273	78 78 78	33,373 32,343 33,742	113 114 114	29,637 30,723 26,647	113 113 113	26,712 29,685 30,003	113 113 114
January February March	2004 2009 2009	27,448 24,684 24,560	80 80 81	17,482 17,523 15,505	63 63	20.815 19.347 18.589	83 84 84	30.202 29.775 27.307	ю 83	30,813 28,921 31,381	83 83 84	October November December	2016 2016 2016	29,245 27,750 30,778	111 111 112	70,381 21,278 22,101	7# 7# 79	36,193 33,237 34,630	114 115 115	29,456 25,671 31,266	114 114 114	37.882 31.716 28.482	114 114 115
April May June	2009 2009 2009	24.759 22,499 27,280	81 81 F2	19.811 16.054 16.643	5 5 5	18.739 20.030 18.840	84 85 85	29,297 27,833 29,152	84 84 84	34,001 30,723 31,368	84 85	January February March	2017 2017 2017	26,384 24,410 24,557	112 112 113	15.457 14.317 12.664	79 79 79	32,794 33,628 33,489	115 116 116	25,559 29,281	115 115 115	28,530 35,215 30,258	115 115 116
July August September	2009 2009	25,006 25,006 22,959	82 83	15,337 15,682 14,044	7 2 3	18.4% 18.196 18.897	85 Ro 86	27,687 27,712 26,006	R5 KS KS	33,710 29,665 32,274	85 85 86	April Mav June	2017 2017 2017	25.677 27.259 26.043	113 113 114	13.343 13.208 14.564	79 79 80	35,914 34,165 31,957	116 117 117	27,979 40,776 38,270	11e 11e 114	30.792 31.200 27.976	116 116 117
October November December	2009 2009 2009	24,637 23,395 19,885	83 84	14.412 14.659 16.357	3 2 3	17,674 18,699 18,259	86 87 87	26,035 30,148	Fo 20 26	33,583 29,872 33,634	86 86 87	July August September	2017 2017 2017	25,285 24,613 25,109	114 114 115	14.677 14.294 19.375	NO NO	30,707 30,919 34,909	117 118 118	30,394 27,690 36,863	117 117 117	26.568 27.277 28.353	117 117 118
January February March	2010 2010 2010	25,965 25,727 24,621	84 84 85	16.73% 10.056 18.495	e5 e5 65	19,873 21,275 22,269	87 88 88	28,790 28,178 26,411	87 87 87	39,151 31,962 33,092	87 87 88	October November December	2017 2017 2017	25,602 24,737 25,806	115 116	17,582 21,123 14,732	RD RD HI	35,980 34,357 34,259	119 119	26,716 28,242 27,849	118 118 118	29,8% 30,349 30,329	118 118 119
April May Jene	2010 2010 2010	25,886 25,866 26,848	85 HS H6	17.165 16.RF7 17.196	65 66	22,762 25,530 25,640	168 169 169	31,716 32,805 31,756	RS AR AR	39,423 32,517 35,331	88 88 89	January February Murch	2018 2018 2018	31,487 24,675 24,377	116 116 117	15.784 14.173 19.081	81 81	40.410 31,217 32.695	119 120 120	28,257 24,417 26,439	119 119	28.025 29.460 29.940	119 119 120
July August September	2016 2016 2010	26,317 27,218 24,990	86 86 87	18.178 18.703 19.171	66 66	25,969 26,035 24,232	90 90	31,182 28,523 24,429	89 89 89 80	39,798 31,924 35,523	89 89 90	April May June	2018 2018 2018	26,283 36,197 27,354	117 117 118	21,019 15,780 13,872	81 82	32,296 31,638 30,336	120 121 121	28,143 33,338 27,222	120 120 120	30.418 30.170 27.684	120 120 121
October November Docember	2010 2010 2010	26,467 26,666 27,922	87 87 88	20.662 21,777 19,573	66 67	24,893 25,345 25,683	90 91 91	27,117 24,378 24,331	90 90 90	37,169 34,665 38,433	90 90 91	July August September	2018 2018 2018	26,688 27,540 29,008	118 118 119	13.917 14.113 12.953	82 82 82	29,239 31,372 34,948	121 122 122	29,397 30,370 30,804	121 121 121	27,415 27,448 27,542	121 121 122
January February March	2011 2011 2011	29,136 25,958 29,082	8K KR H9	16.798 16.740 17.181	67 67	27.062 27.910 26.976	91 92 92	28.461 28.461 30.975	91 91 91	40.515 34,433 36,973	91 91 92	Detaber November December	2018 2018 2018	26.435 27.691 24.204	119 119 120	10.789 12.686 12.918	K2 K3 K3	32,335 36,504 31,266	122 123 123	30.741 29.687 28.404	122 122 122	29,999 29,551 28,964	122 122 123
April May June	2011 2011 2011	29,339 28,250 27,832	89 90	15,747 16,369 17,305	67 68	26,946 24,965 29,536	92 93 93	30.774 31.881 31.557	52 52 52	43,978 34,593 36,617	92 92 93	January February March	2019 2019 2019 2019	30,530 26,123 26,697 25,594	120 120 121	14.366 14.762 17.431 19.356	83 83 83	31,347 28,457 31,421 34,101	123 124 124 124	29.419 26.500 27.621 25.467	123 123 123	29,326 30,169 28,991 28,693	123 123 124
July August September	2011 2011 2011	31.451 28.949 28.408	90 90 91	17,568 17,986 18,269	68 68	29,255 28,442 27,791	93 94 94	31,232 27,128	93 93	37,860 35,610 35,023	93 94	May June	2019 2019	27.571 27.335	121 122	14.822 11.564	83 84	29,268 28,508	124 125 125	28,110 26,717	124 124	28.448 27.533	124 124 125
October November December	2911 2011 2011	27,558 28,766 26,691	91 91 92	20,142 19,616 17,589	68 69	28.766 30.566 28.416	94 95 95	30.278 28.628 29.004	94 94 94	34,156 34,967 35,743	94 94 95	July August September	2019 2019 2019	28.269 25.731 26.562	122 122 123	14.454 12.032 12.689	84 84 84	26,575 25,729 28,648	126 126	28.479 26.392 27.152	125 125 125	25.998 26.239 26.291	125 125 126
January February March	2012 2012 2012	30,394 29,462 28,690	92 92 93	17,181 16,920 19,052	69	28,597 29,297 29,722	95 96 96	28,343 26,878 27,188	95 95 95	29,573 27,723 27,919	95 96	October November December	2019 2019 2019	24,114 21,544 26,016	123 123 124	19,518 17,722 11,409	84 84 85	29,860 29,860 26,935	126 127 127	26,212 27,676 25,603	126 126	28.829 28.011 28.896	126 126 127
April May June	2012 2012 2012	30,379 30,401 30,005	93 93	19,120 14,828 16,243	69 70	31,524 30,213 29,701	96 97 97	28,242 30,838 29,793	96 96	29,861 27,456 26,781	96 96 97	January February March	2020 2620 2020	26.864 24.757 24.827 23.371	124 124 125	10.987 10.919 8.987	85 85 85	25,755 27,688 26,965	127 128 128	24,481 23,630 21,374	127 127 127	26.672 26.672 26.641	127 127 128
July August September	2012 2012 2012	39,599 29,082 29,848	94 94 95	17.145 16.517 15.550	70 70 70	35,113 29,341 27,939	97 98 98	33,010 27,818 25,748	97 97 97	28,243 28,784 28,926	97 97 98	April May June	2020 2020 2020	22,540 34,115	125 125 126	11,357 11,961 11,477	165 165 186	26,252 25,556 26,005	128 129 129 129	21.644 24.053 26,901 27,977	128 128 128	26,714 25,925	128 128 129 129
October November December	2012 2012 2012 2013	30,726 30,373 34,198 30,711	95 95 96	15,928 16,195 16,430 17,914	70 70 71	30.855 30.706 29.430 29.732	98 99 99	27.643 29.119 28.481 28.891	98 48 98	31,975 30,425 31,466 32,678	98 98 99	July August September Octuber	2020 2020 2020 2020	26,857 25,440 22,303 23,768	126 126 127	10.864 13.659	\$6 \$6 \$6	23,987 26,124 26,131 29,929	136 136 130	25,991 19,097 28,251	129 129 129 130	25,437 34,932 24,619 26,318	129 139 130
January February March	2013 2013 2013 2013	29,757 32,416	96 97	17,914 17,017 17,671 20,385	71 71 71	29,732 29,298 28,759 30,248	99 160 160 160	28,891 27,903 29,276 30,441	99 99 99	32,678 30,967 31,333 32,686	99 99 100 100	November December	2020 2620 2020 2021	23,768 24,622 22,877 27,127	127 127 128	11,624 10,672 10,156	86 87	29,929 31,297 27,119 26,626	131 131 131	29,694 39,629 27,361	130 130 130	26.318 30.687 27.465 27.194	130
April May June	2013 2013	31.695 31.786 33.334	97 97 98	19,934 17,433	71 72	29.122 29.588	101 101 101	31,942 32,265	100	32,686 33,775 29,553 29,274	100	January February March	2621 2621	27.127 29.441 26.233 28.873	128 128 129	12,965 11,377	87 87 87	39.622 30.181	131 132 132	32,801 28,966	131 131	36,828 30,896	131 131 132
July August September	2013 2013 2013	33,399 32,052 31,190	98 98 99	18.668 17.363 15.683	72 72 72	28,540 30,085 30,182	102 102	32,293 32,861 27,120 31,098	101	28,900 27,660	101 101 102	April May June	2021 2021 2021	28.873 27.837 28.657 30.320	129 130	14.976 16.225 14.631	87 87 RH	32.441 33.832 33.744	133 133 133	31.601 32.142 36.472	132 132 132	30,087 26,700 27,332	132 132 133
October November Docember	2013 2013 2013	31,548 31,975 32,863	99 100	21,742 20,324 18,467	72 72 73	30,231 30,725 33,448	102 103 103	32,053 32,062	102 102	29,817 29,769 28,584	102 103	July August September	2021 2021 2021	33.622 35.364	130 131	13,616 12,272	SS SS	33,724 33,114 38,295	134 134	32,928 32,003 27,616	133 133 133	26,966 27,186 27,722	133 133 134
January February March	2014 2014 2014	43,923 38,863 35,38)	100	17.821 18.468 14.478	73	38.664 33.54k 31.913	103 104 104 104	34,595 36,666 37,834	103 103 103	31,372 28,081 34,157	103 104	October November December Jenuary	2021 2021 2021	40.804 47.159 \$0.993	131 131	8.267 10.201	kel RR	48,759 72,563 47,423	134 135 135	30.620 31.678 31.671	134 134 134	28.672 32.950 34.560	134 134 135
April May Jone July	2014 2014 2014 2014	31,730 33,277 32,242 32,587	101	16.280 15.744 16.754	73 74	34,215 32,795 30,676 30,751	105 105 105	33,398 35,651 33,714 29,863	104 104 104	29.794 27.875 27.178	104 105 105	February March	2022 2022 2022	45,864 37,817 43,511				45,097 43,933 41,158 52,704	136 136	39,166 34,127 42,118	135 135 135	30,363 28,774	135 135
July August September	2014 2014 2014	34.960 29.212	102	16,243 16,243 14,004	74 74 74	28,445 30,773	105 106	32,375 30,665	105	26,598 26,957 28,087	105	April May Junc	2022 2022 2022	47.522 54.58%				34,104	2.00				

Duke Energy Indiana Cause No. 38707 FAC-133

Residential Customer Bill using 1,000 kWh

Description:	Rider	kWh		Rate	\$	% of Bill
Customer Charge	Base				\$10.54	6.48%
Energy Charge	Base	300	*	\$0.148799	44.64	27.45%
Energy Charge	Base	700		\$0.108297	75.81	46.62%
Coal Gasification Adj.	61	1,000		\$0.000000	0.00	0.00%
Pollution Control Adj.	62	1,000	*	(\$0.001697)	(1.70)	-1.05%
Emission Allowance Adj.	63	1,000	*	\$0.000000	0.00	0.00%
Transmission and Distribution						
Infrastructure Improvement	65	1,000		\$0.001554	1.55	0.95%
Energy Efficiency Adj.	66	1,000	*	\$0.001772	1.77	1.09%
Credit Adjustment	67	1,000		(\$0.004591)	(4.59)	-2.82%
Regional Transmission Operator Adj	68	1,000		\$0.000172	0.17	0.10%
Reliability Adj	70	1,000	*	(\$0.000094)	(0.09)	-0.06%
Clean Coal Adj.	71	1,000	*	\$0.000000	0.00	0.00%
Federal Mandate Rider Adj.	72	1,000	*	\$0.000106	0.11	0.07%
Renewable Energy Rider	73	1,000		\$0.000153	0.15	0.09%
Sub-Total					128.36	78.94%
FAC Charge	60	1,000	**	\$0.034243	34.24	21.06%
Total Billing Amount					\$162.60	100.00%
Base and Energy Charge					\$130.99	80.56%
Other Trackers					(2.63)	-1.62%
FAC					34.24	21.06%
Total				•	\$162.60	100.00%

^{*} Online tariffs as of August 31, 2022, (http://www.duke-energy.com/rates/indiana/tariff.asp)

Duke Energy Indiana Cause No. 38707 FAC-132

Power and Natural Gas Hedging Gains and Losses

FAC	Month/Year	Power Hedging	Gas Hedging	Total Hedging	FAC	Month/Year	Power Hedging	Gas Hedging	Total Hedging
FAC 100	Dec-13	(\$839,153,00)	\$0,00	(5839,153.00)	FAC 117	Mar-18	3,188	253	3,441
	Jan-14	(108,989)	-	(108,989)		Apr-18	(72,267)	409	(71,858)
	Feb-14	(308,100)	-	(308,100)		May-18	(740,942)	112	(740,830)
FAC 101	Mar-14	(111,103)	-	(111,103)	FAC 118	Jun-18	(169,656)	(164,636)	(334,292)
	Apr-14	(49,453)	-	(49,453)		Jul-18	(35,435)	(257,240)	(292,675)
	May-14	(528,710)	-	(528,710)		Aug-18	57,469	(394,533)	(337,064)
FAC 102	Jun-14	(253,055)	-	(253,055)	FAC 119	Sep-18	(30,448)	126	(30,322)
	Jul-14	197,851	-	197,851		Oct-18	(12,043)	65	(11,978)
	Aug-14	363,164	-	363,164		Nov-18	32,466	34	32,500
FAC 103	Sep-14	217,552	-	217,552	FAC 120	Dec-18	41,750	176	41,926
	Oct-14	17,310	-	17,310		Jan-19	(155,302)	84,552	(70,750)
	Nov-14	(561,498)		(561,498)		Feb-19	25,645	246,216	271,861
FAC 104	Dec-14	733,946	246	734,192	FAC 121	Mar-19	31,590	-	31,590
	Jan-15	352,388	33	352,421		Apr-19	201,283	459	201,742
	Feb-15	(5,797)	134,680	128,883		May-19	1,178,491	393	1,178,884
FAC 105	Mar-15	364,197	46,345	410,542	FAC 122	Jun-19	826,977	160,121	987,098
	Apr-15	423,421	-	423,421		Jul-19	(20,568)	588,397	567,829
	May-15	337,407	261	337,668		Aug-19	354,299	908,478	1,262,777
FAC 106	Jun-15	795,375	-	795,375	FAC 123	Sep-19	(155,046)	(315,641)	(470,687)
	Jul-15	187,312	33	187,345		Oct-19	(63,336)	92,149	28,813
	Aug-15	245,336	(68,045)	177,291		Nov-19	(127,797)	(176,809)	(304,606)
FAC 107	Sep-15	306,660	9,675	316,335	FAC 124	Dec-19	55,128	288,706	343,834
	Oct-15	122,895	-	122,895		Jan-20	8,124	822,164	830,288
	Nov-15	(11,189)	56	(11,133)		Feb-20	167,028	734,375	901,403
FAC 108	Dec-15	107,750	275	108,025	FAC 125	Mar-20	478,268	142,803	621,071
	Jan-16	4,008	(158,971)	(154,963)		Apr-20	(27,412)	(91,798)	(119,210)
	Feb-16	42,303	99,879	142,182		May-20	13,649	98,195	111,844
FAC 109	Mar-16	(10,943)		(10,943)	FAC 126	Jun-20	(190,687)	207,075	16,388
	Apr-16	(73,104)	-	(73,104)		Jul-20	145,347	439,678	585,025
	May-16	210,381	206	210,587		Aug-20	(139,093)	102,727	(36,366)
FAC 110	Jun-16	(522,768)	344	(522,424)	FAC 127	Sep-20	17,764	148,875	166,639
	Jul-16	39,637	(380,631)	(340,994)		Oct-20	29,555	40,767	70,322
	Aug-16	(49,953)	(319,323)	(369,276)		Nov-20	29,142	77,356	106,498
FAC 111	Sep-16	(530,972)		(530,972)	FAC 128	Dec-20	39,209	277,476	316,685
	Oct-16	(590,638)	_	(590,638)		Jan-21	(66,730)	278,001	211,271
	Nov-16	362,017	-	362,017		Feb-21	(793,928)	(16,730,143)	(17,524,071)
FAC 112	Dec-16	(402,267)	275	(401,992)	FAC 129	Mar-21	597,524	394	597,918
	Jan-17	171,977	138,618	310,595		Apr-21	(1,260,987)	(54,713)	(1,315,700)
	Feb-17	96,778	260,250	357,028		May-21	(131,366)	(189,882)	(321,248)
FAC 113	Mar-17	274,890	,	274,890	FAC 130	Jun-21	(612,947)	(313,050)	(925,997)
	Apr-17	(132,532)	-	(132,532)		Jul-21	5,581	(945,164)	(939,583)
	May-17	(235,223)	183	(235,040)		Aug-21	(32,084)	(1,183,393)	(1,215,477)
FAC 114	Jun-17	177,532	379	177,911	FAC 131	Sep-21	(200,546)	(1,486,458)	(1,687,004)
	Jul-17	(112,188)	270,432	158,244		Oct-21	(4,830,659)	(1,587,611)	(6,418,270)
	Aug-17	68,662	295,767	364,429		Nov-21	(6,748,364)	(673,721)	(7,422,085)
FAC 115	Sep-17	(1,890,041)	131	(1,889,910)	FAC 132	Dec-21	22,063,830	2,417,780	24,481,610
	Oct-17	50,357	54	50,411	1710 102	Jan-22	2,369,910	4,395,114	6,765,024
	Nov-17	17,121	242	17,363		Feb-22	3,470,198	991,456	4,461,654
FAC 116	Dec-17	5,769	183	5,952	FAC 133	Mar-22	(294,580)	486,977	192,397
	Jan-18	(33,934)	(242,387)	(276,321)	1 40 100	Apr-22	(2,428,064)	(1,564,423)	(3,992,487)
	Feb-18	(77,500)	145,739	68,239		May-22	(9,608,794)	(3,027,533)	(12,636,327)
		(11,000)	,,,,,,,	- 5,200		,	(-,500,701)	1-1-27(000)	
						Total	\$2,149,220	(\$14,889,960)	(\$12,740,740)

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

By: Michael D. Eckert

Director of the Electric Division

Indiana Office of Utility Consumer Counselor

Cause No. 38707 FAC-133

DEI, LLC

Date: September 1, 2022

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing *Indiana Office of Utility Consumer Counselor* Public's Exhibit No. 2 Testimony of OUCC Witness Michael D. Eckert has been served upon the following counsel of record in the captioned proceeding by electronic service on September 1, 2022.

DEI

Andrew J. Wells Liane K. Steffes **DUKE ENERGY BUSINESS SERVICES LLC** andrew.wells@duke-energy.com liane.steffes@duke-energy.com

Steel Dynamics, Inc. Robert K. Johnson **RK JOHNSON ATTORNEY-AT-LAW** rkjatty57@gmail.com

Nucor Steel Anne E. Becker LEWIS KAPPES, P.C. abecker@lewis-kappes.com

IG-Duke Aaron Schmoll Tabitha L. Balzer LEWIS & KAPPES, P.C. aschmoll@lewis-kappes.com tbalzer@lewis-kappes.com

Lorraine Hitz

Deputy Consumer Counselor

Loriaine Hitz

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

115 West Washington Street Suite 1500 South Indianapolis, IN 46204 infomgt@oucc.in.gov

317/232-2775 – Lorraine's Direct Line

317/232-2494 - Phone

317/232-5923 - Facsimile