FILED
April 21, 2022
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

APPLICATION OF INDIANAPOLIS POWER & LIGHT) COMPANY D/B/A AES INDIANA FOR APPROVAL OF) A FUEL COST FACTOR FOR ELECTRIC SERVICE) DURING THE BILLING MONTHS OF JUNE 2022) THROUGH AUGUST 2022, IN ACCORDANCE WITH) THE PROVISIONS OF I.C. 8-1-2-42, AND CONTINUED) USE OF RATEMAKING TREATMENT FOR COSTS OF) WIND POWER PURCHASES PURSUANT TO CAUSE) NOS. 43485 AND 43740, AND AUTHORITY TO) RECOVER COSTS OF THE FUEL HEDGING PLAN) PURSUANT TO I.C. 8-1-2-42.	CAUSE NO. 38703 FAC-135
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INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

PUBLIC'S EXHIBIT NO. 2

TESTIMONY OF OUCC WITNESS MICHAEL D. ECKERT

April 21, 2022

Respectfully submitted,

OFFICIAL EXHIBITS

Lorraine Hitz

Attorney No. 18006-29

Deputy Consumer Counselor

IURC PUBLIC'S

3722

DATE

REPORTER

TESTIMONY OF OUCC WITNESS MICHAEL D. ECKERT CAUSE NO. 38703 FAC-135 INDIANAPOLIS POWER & LIGHT COMPANY D/B/A AES INDIANA

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
4		Office of Utility Consumer Counselor ("OUCC") as the Director of the Electric
5		Division. My 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 in this cause?
10	A:	I discuss the following aspects of Indianapolis Power & Light Company's d/b/a
11		AES Indiana's ("AES Indiana") application: 1) purchased power benchmark
12		agreement approved in Cause No. 43414; 2) Ancillary Services Market ("ASM");
13		3) bill analysis; 4) steam generation cost comparison; 5) actual cost of fuel
14		(Mills/kWh) comparison; 6) coal contract analysis; 7) coal inventory; 8) Lakefield
15		Wind Park ("Lakefield") and Hoosier Wind Power Project LLC ("Hoosier"); 9)
16		coal price decrement; 10) unit commitment status; 11) hedging program; 12) the
17		Eagle Valley Outage ("Eagle Valley"); 13) Root Cause Analysis ("RCA"); 14) sub-

1		docket request; and 13) variance request deterral. Oitimately, the OOCC
2		recommends the Commission:
3 4		1. Approve, interim subject to refund, AES Indiana's proposed mitigated fuel cost factors as recalculated by OUCC witness Gregory T. Guerrettaz;
5 6		2. Require AES Indiana to provide a coal inventory update to the Commission in its next FAC filing;
7 8		3. Defer the investigation of both Eagle Valley forced outages and the related issues, energy and purchased power costs to the FAC-133 S1 sub-docket; and
9 10 11 12		4. Allow AES Indiana to continue to defer as a regulatory asset, without carrying costs, the fuel cost variance for the reconciliation period of May 2021 through January 2022 attributable to the Eagle Valley outage for potential recovery in a future FAC filing and pending the conclusion of the FAC 133 sub-docket.
13 14	Q:	Please describe the review and analysis you conducted in order to prepare your testimony.
15	A:	I read AES Indiana's prefiled testimony and prefiled application in this proceeding,
16		its revised schedules, workpapers, and relevant Commission Orders. I also
17		reviewed AES Indiana's responses to OUCC data requests ("DR") and pertinent
18		sections of Title 8 of the Indiana Code and Title 170 of the Indiana Administrative
19		Code. The OUCC performed its field audit via conference call and Microsoft Teams
20		on Thursday, April 14, 2022 and Friday April 15, 2022. I attended the
21		Commission's Technical Conference regarding Eagle Valley on Thursday, October
22		21, 2021 and participated in meetings with other OUCC staff members and AES
23		Indiana personnel in developing issues identified in this Cause.

II. EAGLE VALLEY COMBINED-CYCLE GAS TURBINE ("CCGT") OUTAGE

2	Q:	Is AES Indiana's Eagle Valley Generating Station ("Eagle Valley") still in a forced outage?
3	A:	No. Eagle Valley was successfully restarted and achieved full load on March 14.
4		Eagle Valley then completed the required MISO capacity test with both gas turbines
5		and steam turbine at full load on March 15. After some testing and tuning, Eagle
6		Valley was released for full load dispatch on March 18, 2022.
7	Q:	Have the issues related to the two forced outages been resolved?
8	A:	No. The Eagle Valley issues regarding the forced outages on April 25, 2021 and
9		November 10, 2021 have not been resolved. These issues and the related cost
10		recovery have been deferred to the sub-docket established in 38703 FAC-133. AES
11		Indiana proposes to address the issues of the forced outages, energy and purchased
12		power costs in the FAC 133 sub-docket. ¹
13 14	Q:	Has AES Indiana provided the OUCC the RCA's associated with each forced outage?
15	A:	No. AES Indiana has provided the OUCC with the RCA for the April 25, 2021
16		outage and intends to provide the OUCC with the RCA for the November 10, 2021
17		forced outage by the end of April 2022.
18	Q:	What treatment is AES Indiana proposing for its variances?
19	A:	AES Indiana is requesting authority to continue to defer as a regulatory asset,
20		without carrying costs, the fuel cost variance (\$35,168,380) for the reconciliation
21		period of May 2021 through January 2022 attributable to the Eagle Valley outage
22		for potential recovery in a future FAC filing and pending the conclusion of the FAC

¹ See AES Indiana's Witness Bigalbal's testimony, pp. 2-3.

1		133 sub-docket. In addition, IPL is requesting recovery of 50.0% (\$34,140,968) of
2		the uncollected portion (\$68,281,936) of the FAC 133 - FAC 135 variances not
3		attributed to the Eagle Valley.
4 5 6	Q:	Did AES Indiana provide a chart that shows 1) total variance; 2) variance attributable to Eagle Valley; and 3) non-outage variances for FAC 133, 134, and 135?
7	A:	Yes. IPL Witness Coklow's Chart 1 on page 7 of her testimony shows these
8		variance amounts by FAC. The OUCC is not opposing IPL's allocation of
9		variances at this time but will review these variance calculations and allocations in
10		the FAC 133 sub-docket proceeding.
11	Q:	What fuel factor is AES Indiana requesting?
12	A:	AES Indiana is requesting that the Commission authorize the Company to place
13		into effect a reduced fuel factor of \$0.013673 per kWh, on an interim basis subject
14		to reconciliation and true-up in a future FAC filing, or pending resolution of the
15		Eagle Valley outage sub-docket established in FAC 133.2 The mitigated factor of
16		\$0.013673 is \$0.008184 lower than the unmitigated factor of \$0.021857, which
17		lowers the bill of an average customer using 1,000 kWh by \$8.19.
18	Q:	What is the OUCC's recommendation regarding the Eagle Valley outage?
19	A:	The OUCC recommends the Commission consider both Eagle Valley forced outage
20		and the related issues, energy and purchased power costs in FAC-133 S1 sub-docket
21		to allow for a more detailed examination of costs and issues associated with both
22		Eagle Valley outages. Additionally, the OUCC recommends the Commission make

² See AES Indiana's Witness Coklow's testimony, p. 5.

1 the rates in this Cause interim subject to refund, to reflect any cost recovery changes 2 resulting from the decisions on the Eagle Valley outages and the RCAs. 3 Q: Did the Commission accept the recommendation to "make the rates in this 4 Cause interim subject to refund, pending the outcome of such subdocket" in 5 Cause No. 38703 FAC-133? 6 Yes. On page 10 of its Order, the Commission stated: A: 7 As indicated above, Applicant did not object to the OUCC's motion 8 to establish a subdocket. The Commission has previously found 9 creation of a subdocket is appropriate where summary FAC 10 proceedings do not lend themselves to sufficient record 11 development. Application of Duke Energy Ind., LLC, Cause No. 12 38707 FAC 111, 2017 WL 1632308, at *8 (IURC April 26, 2017). 13 We agree with the OUCC that, based on the facts in this 14 circumstance, such a review of the Eagle Valley CCGT forced 15 outage discussed above is best accomplished outside the statutory 16 time constraints of the FAC summary proceeding. Accordingly, the 17 Commission finds a subdocket should be created in this proceeding 18 to examine the impact of the Eagle Valley CCGT extended outage 19 on fuel costs, and the recovery of such fuel costs herein are interim 20 subject to refund pending the outcome of such subdocket. 21 Should the rates in Cause No. 38703 FAC 133 and FAC 134 still remain interim Q: subject to refund pending the outcome of the sub-docket? 22 23 Yes. A: III. PURCHASED POWER OVER THE BENCHMARK Is the purchased power over the benchmark treatment controlled by the 24 O: 25 Commission's Cause No. 43414 Order? 26 Yes. On April 23, 2008, the Commission issued its Cause No. 43414 Final Order A: 27 approving a joint Settlement Agreement and ordering AES Indiana and Vectren 28 South to file testimony in each FAC regarding any purchased power, including the 29 volume, cost, and reasons for purchases. The Settlement Agreement provides a 30 mechanism by which AES Indiana may recover purchased power costs that exceed

the benchmark. After reviewing the Cause No. 43414 Settlement Agreement and

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1		AES Indiana's testimony and workpapers in the current proceeding, it is my opinion
2		AES Indiana followed the guidelines and procedures that were established in Cause
3		No. 43414.
4 5	Q:	Did you review AES Indiana's workpapers to determine if AES Indiana calculated its purchased power costs that exceed the benchmark correctly?
6	A:	Yes. I also reviewed AES Indiana's daily plant logs for the generating stations that
7		were off-line on the days AES Indiana incurred purchased power over the
8		benchmark.
9 10	Q:	How does your calculation of purchased power over the benchmark compare to AES Indiana's calculation?
11	A:	I calculated the same amount of purchased power cost in excess of the benchmark
12		as AES Indiana, following the procedures established in Cause No. 43414. AES
13		Indiana's purchased power cost that exceeded the benchmark of \$2,487,937 is
14		recoverable. ³
15 16	Q:	Were actual natural gas and purchased power prices higher than the forecast for this historical FAC period?
17	A:	Yes. ⁴
18 19	Q:	Does the OUCC have concerns that IPL met all the requirements of the Purchased Power Over The Benchmark Order in Cause No. 43414?
20	A:	Yes. While I have determined that IPL performed the calculation of the purchased
21		power over the benchmark correctly, the OUCC is concerned that IPL did not
22		determine if the Eagle Valley outage (as discussed above) was a result of
23		"imprudence, malfeasance, nonfeasance, or other inappropriate acts." Specifically,

 ³ See AES Indiana's Exhibit DJ-2, Column labeled "Amount Above Daily Benchmark."
 ⁴ See AES Indiana's Witness Jackson's testimony, p. 7.

1		the Settlement in Cause No. 43414 that established the over-the-benchmark
2		methodology in Section I(c)(3) states:
3 4 5 6 7 8 9 10 11		3. After application of section (c)(1), if the sum of unplanned full forced outages, qualifying environmental derates, partial outages, and qualifying scheduled maintenance outages total 11 % or more of the utility's seasonal generating fleet capacity, this condition is considered as a special condition whereby purchases made to account for such outages which exceed the benchmark shall be recovered. In addition, any power purchases made to account for environmental derates are recoverable. To quantify this, determine the total MW of unplanned full forced
13 14 15 16		outages, qualifying environmental derates, partial outages, and qualifying scheduled maintenance outages for each generating unit in the particular hour.
17 18 19 20 21		a. An unplanned full forced outage is defined as a complete outage due to mechanical or electrical equipment failure, which is not the result of imprudence, malfeasance, nonfeasance, or other inappropriate acts. ⁵ Emphasis added.
22	Q:	What does the OUCC recommend?
23	A:	The OUCC recommends that final resolution of the recoverability of the \$2,487,937
24		in purchased power over the benchmark in this FAC proceeding be deferred to the
25		FAC-133 sub-docket proceeding. In addition, the OUCC recommends that final
26		resolution of the recoverability of the amounts in FAC-133 (\$1,198,183) and FAC-
27		134 (\$1,183,609) be deferred to the FAC-133 sub-docket proceeding.
		IV. <u>ASM</u>
28 29	Q:	Is AES Indiana's calculation of ASM charges consistent with the Commission's Cause No. 43426 Order?

⁵ Joint Petition of Indianapolis Power & Light, Cause No. 43414, Final Order, Exhibit 1, Exhibit A, pp. 1 - 2 (Ind. Util. Regul. Comm'n Apr. 23, 2008).

- 1 A: Yes. AES Indiana's proposed ratemaking treatment for the ASM charge types is
- 2 consistent with the Commission's approved ratemaking treatment in its Cause No.
- 3 43426 Phase II Order, dated June 30, 2009.

V. BILL ANALYSIS

- 4 Q: Have you calculated the bill impact on a typical residential customer's bill using 1,000 kWhs at AES Indiana's proposed rate and compared that to the same typical customer's bill using the currently approved rate?
- Yes, I did, and I arrived at the same numbers as AES Indiana witness Natalie Herr

 Coklow, using AES Indiana's original forecast. An average residential customer

 using 1,000 kWh will experience an increase of \$6.25 or 5.08%.
- Have you calculated the bill impact on a typical residential customer's bill using 500, 1,000, 1,500, and 2,000 kWhs using AES Indiana's proposed rate of \$0.013673 and then compared it to the same typical customer's bill using the currently approved rate?
- 14 A: Yes, I did, as reflected in the table below. Table 1 below demonstrates the comparison using the AES Indiana's proposed rate.

	Table 1 –	Petitioner's Prop	osed FAC	
Consumption	Bill at Proposed FAC	Bill at Current FAC	Dollar Inc/(Dec)	% Increase/ (Decrease)
500	\$77.06	\$73.94	\$3.12	4.23%
1,000	\$129.27	\$123.02	\$6.25	5.08%
1,500	\$181.49	\$172.11	\$9.38	5.45%
2,000	\$233.70	\$221.19	\$12.51	5.66%

16 Q: What assumptions did you make in this calculation?

17 A: In making this calculation, I did not include any dollar amount for other trackers,
18 nor did I include taxes. Therefore, this calculation reflects the proposed change to
19 the FAC factor and AES Indiana's base rates.

1 2	Q:	Have you provided a calculation of a typical customer's bill using 1,000 kWh as of April 2022?
3	A:	Yes. See Attachment MDE-3. A typical residential customer using 1,000 kWh as
4		of April 2022 will pay \$132.04, excluding taxes. This amount consists of \$115.60
5		in base charges that were set in AES Indiana's last rate case (Cause No. 45029),
6		(\$7.42) in FAC charges, and \$9.02 in non-FAC tracker charges (DSM, ECR,
7		Capacity, OSS, TDSIC, & RTO).
8 9 10	Q:	Why do the FAC charges register as a charge of \$7.42 in the answer above, when your chart above shows an increase to 1,000 kw/month customers of \$6.25?
11	A:	The April 2022 bill uses an FAC factor of \$0.007418, which was authorized in
12		Cause No. 38703 FAC-134 for the billing months of March 2022, April 2022, and
13		May 2022. The table above calculates the increase in a customer's bill from the
14		current authorized FAC (134) factor of \$0.007418 to the proposed FAC factor of
15		\$0.013673 in this proceeding (135). Therefore, a customer using 1,000 kWh will
16		see an increase of \$6.25.
		VI. ACTUAL COST OF FUEL (MILLS/KWH) COMPARISON
17 18	Q:	Did you do a comparison of the actual monthly cost of fuel (Mills/kWh) for the five Indiana electric IOUs?
19	A:	Yes. AES Indiana's actual monthly cost of fuel (including wind and solar)
20		(mills/kWh) is higher than the other Indiana electric IOUs (see Attachment MDE-
21		2).

VII. STEAM GENERATION COST COMPARISON

1 2	Q:	Did you do a comparison of steam generation costs for Indiana's five electric investor-owned utilities ("IOUs")?
3	A:	Yes, I did. AES Indiana's steam generation costs are comparable to the other
4		Indiana electric IOUs (See Attachment MDE-2).
		VIII. <u>LAKEFIELD AND HOOSIER</u>
5 6	Q:	Did AES Indiana update the Commission on locational marginal prices ("LMPs") at Lakefield and Hoosier wind farms?
7	A:	Yes. AES Indiana witness David Jackson provided testimony on this issue. 6 AES
8		Indiana offers Lakefield and Hoosier into the day-ahead market to mitigate the
9		impact of negative LMPs in real-time.
		IX. <u>COAL INVENTORY</u>
10	Q:	What is AES Indiana's current coal inventory?
11	A:	AES Indiana's current coal inventory is within AES Indiana's target levels (25-50
12		days).
13 14	Q:	Is AES Indiana actively trying to manage its coal purchases and coal inventory?
15	A:	Yes. AES Indiana indicated in discussions with the OUCC that it is actively looking
16		at options ⁷ to address its coal inventory.
17	Q:	Should AES Indiana update the Commission on its coal inventory?
18	A:	Yes. AES Indiana should also update the Commission in future FAC proceedings
19		on its 2022 projected coal burn and coal purchases.

⁶ See AES Indiana's Witness Jackson's testimony, pp. 16-17.

⁷ *Id.*, pp. 32-35.

X. <u>HEDGING PROPOSAL</u>

1	Q:	Did AES Indiana the the results of its natural gas nedging program?
2	A:	Yes. Mr. Jackson provided the results of its natural gas hedging program. AES
3		Indiana did not transact any financial hedges in August 2021, September 2021, and
4		October 2021.8
5 6	Q:	Did AES Indiana provide additional information regarding its natural gas hedging program?
7	A:	Yes. AES Indiana provided information in the testimony of Mr. Jackson ⁹ and
8		during the FAC audit.
9 10	Q:	What does the OUCC recommend regarding AES Indiana's natural gas hedging proposal?
11	A:	The OUCC recommends the Commission require AES Indiana to:
12 13		1) Continue to file the results of its natural gas hedging program in each subsequent FAC filing; and
14 15		Provide analysis of the facts and circumstances as they existed at the time the transactions at issue were entered into in future FAC proceedings.
		XI. <u>PURCHASED POWER HEDGING</u>
16	Q:	Did IPL hedge purchased power during this FAC period?
17	A:	Yes. Due to the loss of the generating capacity of Eagle Valley, AES Indiana
18		customers were exposed to price risk during the summer when higher temperatures

⁸ See AES Indiana's Witness Jackson's testimony, p. 45.

⁹ *Id.*, p. 46.

1		created periods of high-priced peak power. In addition, the fall can experience
2		either hotter or colder periods which can create periods of higher priced peak
3		power. In recognition of the continued outage, AES Indiana hedged blocks of
4		purchased power to mitigate increased costs.
5	Q:	Is the OUCC opposing the purchased power hedges?
6	A:	No.
		XII. <u>UNIT COMMITMENT STATUS</u>
7 8	Q:	Does the OUCC review AES Indiana's unit commitment status during its FAC audit?
9	A:	Yes. The OUCC generally reviews AES Indiana's unit commitment status and Mr.
10		Guerrettaz's testimony details some of the analysis done by the OUCC during its
11		FAC audit. In general, the OUCC's FAC audit process has focused more on the
12		cost of fuel and the cost of purchased power.
13 14	Q:	Did AES Indiana provide an update on the commitment of the Petersburg Generating Station Units ("Petersburg Units")?
15	A:	Yes. Mr. Jackson provided sixteen (16) pages of testimony updating the
16		Commission on the Petersburg Units' status. 10
17 18	Q:	What is the status of the Petersburg Units and when were they last called on by MISO to produce power?
19	A:	As of April 14, 2022, the status of the Peterburg Units and the last time MISO called
20		on each of the Petersburg Units is shown below:

¹⁰ See AES Indiana's Witness Jackson's testimony, pp. 17-32.

Generating Units	Last Date Called on by MISO	Online/Offline	Offer Status
Petersburg Unit 1			Retired
Petersburg Unit 2	April 12, 2022	Offline	Outage
Petersburg Unit 3	April 14, 2022	Online	Economic
Petersburg Unit 4	April 14, 2022	Online	Economic

- 2 Q: Should AES Indiana continue to update the Commission on AES Indiana's Petersburg Units' commitment status?
- 4 A: Yes.

XIII. <u>RECOMMENDATIONS</u>

5	Q:	What	does the OUCC recommend in this proceeding?						
6	A:	The C	he OUCC recommends the Commission:						
7 8		1)	Approve, interim subject to refund, the AES Indiana's proposed mitigated fuel cost factor as recalculated by Mr. Guerrettaz;						
9 10		2)	Allow AES Indiana to recover, interim subject to refund, its total purchased power over the benchmark in the amount of \$2,487,937;						
11 12 13		3)	Defer final resolution of the recoverability of the FAC-133 (\$1,198,183) and FAC-134 (\$1,183,609) purchased power over the benchmark to the FAC-133 sub-docket proceeding;						
14 15		4)	Require AES Indiana to continue to file the results of its natural gas hedging program in each FAC;						
16 17 18		5)	In future FAC proceedings, require AES Indiana to provide analysis of the facts and circumstances as they existed at the time any hedging transactions were entered into;						
19 20 21		6)	Require AES Indiana in future FAC proceedings to provide the Commission its revised hedging program (natural gas and purchased power), if revised;						
22 23		7)	Require AES Indiana in future FAC proceedings to update the Commission on its 2022 projected coal burn and coal purchases;						
24		8)	Require AES Indiana to update the Commission on the Petersburg						

1			Units' commitment status in future FAC proceedings;
2 3 4		•	Defer the investigation of both Eagle Valley forced outages and the related issues, energy and purchased power costs to the FAC-133 S1 sub-docket;
5 6 7			Determine the rates in Cause No. 38703 FAC 133 and FAC 134 remain interim subject to refund pending the outcome of the subdocket; and
8 9 10 11			Allow AES Indiana to continue to defer as a regulatory asset, without carrying costs, the fuel cost variance for the reconciliation period of May 2021 through January 2022 attributable to the Eagle Valley outage for potential recovery in a future FAC filing and pending the conclusion of the FAC 133 sub-docket.
13	Q:	Does th	nis conclude your testimony?
4	A:	Yes, it	does.

APPENDIX A

QUALIFICATIONS OF MICHAEL D. ECKERT

1 Q: Please describe your educational background and experience.

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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 Commissioners' ("NARUC") two-week seminar in Lansing, Michigan. I attended NARUC's Spring 1993 and 1996 seminars 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.

	COMIN	29.863 32.375 30.605	32.872 31.478 28.582	27.708 28.799 27.126	26.642 30.907 29.840	30.308 29.217 27.402	29,507 29,507 25,701	28.094 27.173 28.645	29.993 27.882 29.012	29.037 30.723 26.647	29.456 25.671 31.266	28,030 25,559 29,281	27,979 40,776 38,270	30,394 27,890 30,863	28.242 27.849	28.257 24.417 26.439	28.143	29,397 30,370 30,804	30.741 29.687 28.404	29,419 26,500 27,621	28,467 28,110 26,717	28.479 26.392 27.152	26.212 27.676 25.033	24,481 23,630 21,374	21.644 24.053 26.901	27.977 25.991 19.697	29,694 30,029	27,361 32,801 28,966	31.601 32.142 36.472	32.928 32,003 27,616	30,620 31,678 31,671	
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	Induna Michigan Power	16.232 16.243 14.004	19.319 20.385 14.991	17,009 17,573 16,500	20,400 16,03 21,881	21,461 16,383 13,252	16.024 15.709 15.995	16.819 15.968 14.427	20.311 14.554 15.382	18.104 16.533 15.273	20,381 21,278 22,101	15.457 14.317 12.664	13.343 13.208 14.564	14.677 14.294 19.375	17.582 21.123 14.732	15.784 14.173 19.081	21.019 15.780 13.872	13.917 14.113 12.953	10,789 12,686 12,918	14,366 14,762 17,431	19.356 14.822 11.564	13,032	19.518 17.722 11.409	10,987 10,919 8,987	11.337	11,665 10,864 13,659	13,087 11,624 10,072	10.156 12.965 11.377	14.976 16.225 14.631	13,516 13,616 272,21	\$267 10.201	
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losi 1	Duke	34.960 215.87	32.201 36.849 31.889	30.854 32.468 27.290	28,062 29,738 28,414	27.835 26.964 25.864	24.907 25.149 24.158	25.742 25.444 21.266	26.465 25.192 28.079	27.782 27.651 27.841	29.245 27.750 30.778	26,384 24,410 24,557	25.677 27,259 26,043	25.285 24.613 25.109	25.802 24.737 25.806	31.487 24.675 24.377	26.283 30.197 27.354	26.688 27.940 29.608	26.435 27.691 24.204	30.530 26.123 26.897	25.594 27.571 27.335	28.269 25.731 26.562	24.114 21.544 26.016	26.864 24.757 24.827	25.540	25.857 25.440 22.303	23.768 24.622 22.877	27.127 29.441 26.233	28.873 27.837 28.657	30,320 33,622 35,364	40.804	
AC-135	į	2014	2014 2014 2014	2015 2015 2015	2015 2015 2015	2015 2015 2015	2015 2015 2015	2016 2016 2016	2016 2016 2016	2016 2016 2016	2016 2016 2016	2017	2017	2017	2017	2018 2018	2018 2018	2018 2018	2018 2018	2019 2019 2019	2019	2019	2019 2019 2019	2020 2020 2020	2020 2020 2020	2020 2020 2020	2020 2020 2020	2021 2021 2021	2021 2021 2021	2021 2021 2021	2021 2021 2021	2022
AES Indinas Cauve No. 38703 FAC-135 ectual Cost of Fuel (Mills/Wh) Compariso	Month	July August September	October November December	January February March	April May June	July August September	October November December	Jamany February March	April May June	July Auenst September	October November December	Jamanry February March	April May June	July August September	October November December	Jamusry February March	April May June	July August September	October November December	January February March	April May June	July August September	October November December	January February March	April May June	July August September	October November December	January February March	April May June	July August September	October November December	James
Car	3,4€	222	2 % 12	E E E E	222	223	8 8 8	2 2 Q	222	221	112	222	22 KE	2 2 3	2 2 2	8 g F	8 8 2	2 2 2	888	888	332	223	2 2 5	26.55	2 2 2	8.88	8 8 6	2 <u>0</u> 2	383	888	¥ ¥ 8	
Actus	CemerNuz	23.25K 22.609 25.221	23.808 22.858 18.872	24.456 29.769 28.097 22.298	25,574 19,199 23,509	25,349 25,213 27,944	21.578 32.326	23.701 25.788	29.726 22.083 31.687	30.813 28.921 31.381	34,001 30,723 31,368	33.710 29.665 32.274	33.583 29.872 33.634	39.151 31.902 33.092	39,423 32,517 35,331	39,798 31,924 35,523	37.109 34.065 38.433	40.515 34.433 36.973	43,978 34,593 36,617	35.610 35.623	34.156 34.967 35.743	29,573 27,723 27,919	28.861 27.456 26.781	28.243 28.784 28.926	31.975 30.425 31.466	32,678 30,967 31,333	32,686 33,775 29,553	29.274 28.900 27.660	29,709 29,709 28,584	31.372 28,081 34,157	29,794 27,875 27,178	
	. FAC	222	8 8 8	FF F	* * *	222	222	2 2 2	888	3 2 2	222	ភភភ	222	222	2 2 2	222	8 8 8	2 2 2	2 2 2	93	2 Z Z	222	888	2 2 2	* * *	888	9 9 9	<u> </u>	888	2 2 2	3 2 2	
	Solar	26.497 33.278 26.336	25.958 30.934 32.563	35.423 35.433 26.007	24,781 40,363	28.307 32.597 33.271	28.639	32.511 28.751 28.292	26,998 23,261 25,457	30,202 29,775 27,307	29.287 27.833 29.152	27.687 27.712 26.006	26.106 26.635 30.148	28.790 28.178 26.411	31.716 32.805 31.756	31.182 38.523 24.429	29,378 29,338 29,331	2x.619 2x.461 30.975	30,774 31,881 31,557	36.825 31.232 27.128	30.278 28.628 29.004	28,343 26,878 27,188	28.242 30.838 29.793	33.010 27.818 25.748	27,643 29,119 28,481	28,891 27,963 29,276	30,441 31,942 32,265	32.283 32.861 27,120	31.098 32.053 32.002	34.595 36.066 37.834	33,714	
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	s Power &	16.730 18.388 18.436	17.626 17.807 15.589	17.772 21.676 18.446	21,142 17,260 17,212	18,146 18,902 19,380	18.572 16.300 23.130	20.897 20.897	20.981 19.5% 19.337	20.815 19.347 18.589	18.739 20.030 18.840	18,166 18,198 18,897	17,674 18,699 18,259	19.873	25,530 25,530 25,690	25.909 26.035 24.232	25,345	27,062 27,910 26,976	26,946 24,905 29,536	29,255 28,442 27,791	28.766 30.566 28.416	78.597 762.62 257.61	31.524 30.213 39.701	25,113 29,341 27,939	30,855 30,706 29,430	29,732	30.248 29.122 29.588	28.960 30.085 30.182	30,331 30,725 33,448	38.669 33.548 31.913	34,215 32,795 30,676	
	FAC	888	888	88 8	882	19 19	19 00 00	888	888	222	222	2 2 2	2 2 2	2 2 2	888	388	888	59 59	69 69	\$ 2 3	222	233	888	555	555	E E E	2 2 3	* # #	222	222	233	
	Indiana Michigan Ponor	11.85	12.022 11.225 11.088	11.943	14.564	12.156 13.413 14.311	14,082 15,185	15.569 17.520 16.509	20,783 20,375 18,698	17,482 17,523 15,505	19.811 16.054 16.643	15,337 15,682 14,644	14,412 14,699 16,357	16,738 16,056 18,985	17.165 16.887 17.196	18.178 18.703 19.171	20.662 21.777 19.573	16,798 16,740 17,181	15,747 16,369 17,305	17,568 17,986 18,269	20.142 19.616 17.589	15,181 16,920 19,052	19,120 14,828 16,243	17,145 16,517 15,550	15,928 16,195 16,430	17,914 17,617 17,671	20,385 19,934 17,433	18.668 17.363 15.683	21.742 20.324 18.467	17.821 18.468 14.478	16.280 15.244 16.754	
	EAC	222	222	2 2 2	25 25 25	8 % 7.	2.1.1	* * *	223	8 8 2	2 2 Z	222	221	128	8 8 8	88 88 78	222	222	8 2 2	882	9 2 9	2 2 2	2 2 2	3 3 8	8 8 9	96 64	97 98	889	8 8 8	332	5 5 5	
	Duke	18.974 20.526 16.663	26.748 21.021 17,418	21,455 26,428 18,147	21.620 16.620 18.545	21,946 22,933 29,699	24.034 26.159 30.286	25.29h 25.728 24.964	24,546 23,389 23,936	24,500	21,759 22,499 27,280	25,006 22,959	24,637 23,395 19,885	25,965 25,727 24,621	25.88n 25.060 26,848	26.317 27,218 24,990	26.407 26.666 27.022	29,136 25,958 29,082	29,339 28,250 27,832	31,451 28,949 28,408	27.558 28.766 26.691	30,394 29,462 28,690	30,401	29,599 29,082 29,848	30,726 30,373 34,198	39,757 32,416	31.786	33,399 32,052 31,190	31,548 31,975 32,863	43,923 38,863 35,381	33,277	
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AES indiana Cause No. 38703 FAC-135

					Stea	m Generation	Cost Compar	ison					
Month	Year	Duke Energy	Indiana Michigan Power	Indianapoli s Power & Light	NIPSCO	CenterPoint South	Month	Year	Duke Energy	Indiana Michigan Power	Indianapoli s Power & Light	NIPSCO	CenterPoint South
January February March	2007 2007 2007	**	\$17.170 16.302 17.037	\$13.258 13.658 13.241	\$19,628 19,596 19,639	\$20.067 20.069 19.883	July August September	2014 2014 2014		26.952 27.390 21.997	23.416 28.445 30.773	27.969 28.231 28.230	26.762 25.763 26.197
April May	2007 2007		17.769 18.673	13.688 13.579	19.540 20.843	20.585 20.707	October November	2014 2014		25.738 26.728	32.170 24.532	27.248 28.011	26.417 25.478
June July	2007		16.973 17.916	14.096 14.094	20.389	20.182	December	2014		25.605	23.527	26.574	26.039
August August September	2007 2007 2007		19.025 20.209	14.530 14.002	20.498 20.295	20.422 20.422 19.849	January February March	2015 2015 2015		27.191 26.269 22.549	23.497 24.232 24.195	25.752 25.913 25.525	27.287 26.293 26.750
October November December	2007 2007 2007		20.572 26.158 20.936	14.038 13.596 13.583	20.777 20.928 21.147	20.904 20.652 21.612	April May June	2015 2015 2015		22.438 25.270 27.006	23.437 23.325 25.561	24.555 25.308 26.773	26.463 25.994 26.904
January February March	2008 2008 2008		19.527 20.362 23.903	14.241 14.706 15.223	20.253 22.090 22.098	20.948 21.970 20.854	July August September	2015 2015 2015		26.312 24.397 17.891	23.672 23.601 23.741	26.544 27.554 26.131	26.387 25.480 26.280
April May June	2008 2008 2008		20.990 22.972 23.708	14.687 15.028 15.694	22.363 22.700 22.885	22.476 22.579 22.903	October November December	2015 2015 2015		25.405 24.520 26.001	23.667 23.089 28.690	26.135 29.840 22.179	26.346 27.464 29.998
July August September	2008 2008 2008		23.512 26.033 26.369	15.753 16.174 16.089	22.269 22.720 22.392	21.947 21.701 21.398	January February March	2016 2016 2016		26.382 24.782 12.691	22.756 24.789 23.912	29.902 29.464 29.439	28.590 28.292 29.261
October November December	2008 2008 2008		28.047 26.882 25.630	16.990 16.446 16.200	20.222 21.422 22.406	21.922 21.192 21.476	April May June	2016 2016 2016		24.150 24.981 25.364	23.508 23.653 22.978	29.110 28.551 25.862	27.242 27.164 26.213
January February March	2009 2009 2009		25.582 24.000 20.815	16.107 15.711 15.782	25.922 28.132 26.784	25.786 28.839 29.188	July August September	2016 2016 2016		25.592 26.126 26.854	24.093 23.881 23.757	26.559 25.866 26.956	26.252 26.767 25.976
April May June	2009 2009 2009		23.918 21.705 23.730	15.672 15.793 15.295	26.647 26.314 26.048	30.698 33.507 32.740	October November December	2016 2016 2016		25.295 26.251 25.324	25.603 23.529 24.034	27.421 27.415 26.265	25.344 27.014 26.114
July August September	2009 2009 2009		22,364 20,489 19,544	15.113 15.247 14.968	26.327 25.707 25.708	32.846 33.152 34.242	January February March	2017 2017 2017		24.234 25.272 18.832	23,289 23,028 21,687	26.796 26.318 27.503	25.785 26.177 25.618
October November December	2009 2009 2009		22.783 22.076 22.543	15.046 14.985 15.117	25.820 26.323 27.094	31.128 33.328 33.067	April May June	2017 2017 2017		24.427 24.615 24.941	23.770 23.800 22.189	28.401 29.785 28.828	26.435 25.270 24.834
January February March	2010 2010 2010		21.322 20.569 22,576	15.724 17.057 18.453	27.370 26.853 25.518	31.800 32.762 32.732	July August September	2017 2017 2017		24.333 24.583 24.531	22.378 23.027 23.494	27.586 26.420 25.583	25.042 25.339 26.558
April May June	2010 2010 2010		22.109 22.244 22.853	18.843 19.988 20.389	26.032 25.762 27.820	33.361 34.854 32.529	October November December	2017 2017 2017		20.555 24.661 23.847	24.385 23.090 23.840	24.418 27.061 25.733	26.092 26.360 26.961
July August September	2010 2010 2010		24.191 25.663 24.650	20.687 21.080 20.705	32.402 26.834 26.115	33.720 33.480 34.401	January February March	2018 2018 2018		23.180 25.057 20.209	22.415 22.815 22.083	26.382 28.280 26.959	26.764 26.907 26.656
October November December	2010 2010 2010		22.395 22.491 22.659	21.082 21.118 20.555	26.942 26.585 28.795	34.857 35.410 35.591	April May June	2018 2018 2018		24.048 23.933 25.669	21.120 22.590 21.705	27.127 24.337 24.064	25,571 26,095 26,096
January February March	2011 2011 2011		20.956 22.068 24.766	20.753 21,425 21,651	27.896 28.394 29.036	35.043 35.582 36.068	July August September	2018 2018 2018		25.526 24.755 26.052	21.817 22.268 21.867	25.030 27.141 26.613	25.669 25.227 25.425
April May June	2011 2011 2011		23.263 23.302 23.935	22.169 21.442 22.420	29.308 28.825 29.311	37.562 35.813 35.859	October November December	2018 2018 2018		18.367 24.338 25.841	21.395 23.050 21.380	26.252 25.631 24.654	25.825 25.805 26.225
July August September	2011 2011 2011		24.189 23.782 23.088	22.527 23.009 22.088	29.875 29.334 27.931	36.551 35.493 36.721	January February March	2019 2019 2019		27.252 28.353 22.088	21.678 21.415 22.505	26.527 27.631 25.570	26.319 26.192 24.653
October November December	2011 2011 2011		23.970 23.311 21.902	22.163 22.263 22.376	27.925 26.560 26.644	37.020 38.509 38.877	April May June	2019 2019 2019		26.536 27.450 28.017	21.771 22.668 21.700	24.720 24.365 24.427	24.620 24.981 25.731
January February March	2012 2012 2012		21.278 21.571 26.117	21.584 22.496 21.941	26.283 24.679 24.520	27.727 26.060 25.741	July August September	2019 2019 2019		25.638 26.093 26.601	20.550 20.107 20.371	24.218 23.645 23.086	24.456 24.936 24.475
April May June	2012 2012 2012		21.401 21.419 22.167	23.745 23.965 22.958	24.526 25.157 26.526	26.097 26.037 25.572	October November December	2019 2019 2019		26.979 27.029 27.624	19.891 20.701 19.249	24.856 24.098 23.921	25.012 24.902 25.989
July August September	2012 2012 2012		22.455 22.751 21.266	25.210 24.524 23.399	27.584 27.429 26.974	25.854 26.735 28.336	January February March	2020 2020 2020		39.156 27.154 15.799	20.278 19.399 18.525	24.143 25.026 25.307	24.714 25.625 26.131
October November December	2012 2012 2012		21.222 22.161 22.868	23.124 22.904 22.894	26.595 25.797 25.730	28.630 28.008 29.143	April May June	2020 2020 2020		25,067 27,314 27,210	(0.211) 37.614 19.931	26.145 30.549 27.363	27.705 26.225 25.008
January February March	2013 2013 2013		24.306 25.587 25.487	23.140 22,911 22.800	28.319 27.123 27.074	29.340 28.796 28.431	July August September	2020 2020 2020		27.938 27.166 28.022	19.821 20,531 19.618	24.607 23.200 23.573	24.803 25.166 25.349
April May June	2013 2013 2013		24.394 26.229 26.294	23,318 22,910 24,314	28.563 28.938 28.394	29.049 28.567 28.089	October November December	2020 2020 2020		0.507 28.331 0.000	24.045 20.884 19.269	24.194 24.650 27.295	25.057 25.508 24.803
July August September	2013 2013 2013		25.817 25.693 23.863	23.734 24.479 23.218	28.072 27.054 26.685	28.035 28.219 28.022	January February March	2021 2021 2021		120.491 28.541 43.462	19.069 19.566 19.445	26.999 28.005 26.299	25.073 25.814 25.180
October November December	2013 2013 2013		26.216 25.848 26.081	23,472 23,232 24,007	26.844 27.822 27.499	27.719 28.231 28.142	April May June	2021 2021 2021		32.723 29.301 29.334	19.814 20.725 20.845	26.911 26.446 30.644	25.023 25.550 66.344
January February	2014 2014		25.529 27.393	24.550 24.538	29.414 32.326	28.097 28.048	July August	2021 2021		33.447 32.115	20.500 20.276	26.197 23.566	25.342 25.615
March April	2014		23.107	23.463	31.978 29.116	27.154 28.722 26.666	September October	2021		0.000	20.888	24.586	24.757 25.371
May June	2014 2014		28.489 27.603	24.487 23.021	29.296 28.575	26.666 27.346	November December January	2021 2021 2022		0.000	26.967 23.709 25.191	28.611 37.660	26,122
*** Informat	tion was obtai	ned from the pre	filed applicatio	ns of the identifi	ed companies.		February	2022			20.171		

Indianapolis Power and Light Company Cause Number 38703 FAC 135

April 2022 Residential Customer Bill using 1,000kWh

Line					
No.	Description:	kWh	Rate	\$	% of Bill
1	Customer Charge			\$17.00	12.88%
2	Energy Charge (First 500 KWH per month)	500	\$0.106454	53.23	40.31%
3	Energy Charge (Second 500 KWH per month)	500	\$0.090752	45.38	34.37%
4	Fuel Charge	1,000	\$0.007418	7.42	5.62%
5	Demand Side Management Adjustment	1,000	\$0.005235	5.24	3.96%
6	ECR (NOX)	1,000	\$0.000196	0.20	0.15%
7	Capacity Adjustment	1,000	\$0.001116	1.12	0.85%
8	Off-System Sales Margin Sharing	1,000	\$0.001009	1.01	0.76%
9	Regional Transmission Organization Adjustment	1,000	\$0.000135	0.14	0.10%
9	Transmission, Distribution and StorageSystem Improvement Cha	1,000	\$0.001326	1.33	1.00%
10	Total Billing Amount (Excluding Taxes)			\$132.04	100.00%
11	Base Charge (Lines 1, 2, and 3)			\$115.60	87.55%
12	Non-FAC Trackers (Lines 5 & 6)			9.02	6.83%
13	FAC (Line 4)			7.42	5.62%
114	Total			\$132.04	100.00%

Note: Per Online tariffs as of April 20, 2022.

AFFIRMATION

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

By: Michael D. Eckert

Assistant Director of the Electric Division Indiana Office of Utility Consumer Counselor

Cause No. 38703 FAC-135 AES Indiana

Date: April 21, 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 parties of record in the captioned proceeding by electronic service on April 21, 2022.

Teresa Morton Nyhart
Jeffrey M. Peabody
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ipeabody@btlaw.com

Lorraine Hitz

Deputy Consumer Counselor

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