

FILED
July 31, 2023
INDIANA UTILITY
REGULATORY COMMISSION

I&M Exhibit: _____

INDIANA MICHIGAN POWER COMPANY

38702 FAC-91

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

JEFFREY C. DIAL

IURC
PETITIONER'S 4
EXHIBIT NO. 10-3-23
DATE CR REPORTER

**OFFICIAL
EXHIBITS**

**DIRECT TESTIMONY OF JEFFREY C. DIAL
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY**

Q1. Please state your name and business address.

My name is Jeffrey C. Dial. My business address is 1 Riverside Plaza,
Columbus, Ohio 43215.

Q2. By whom are you employed and in what capacity?

I am employed by American Electric Power Service Corporation (AEPSC) as
Director – Coal, Transportation, and Reagent Procurement. AEPSC supplies
engineering, financing, accounting, and similar planning and advisory services
to the subsidiaries of the American Electric Power (AEP) system, including
Indiana Michigan Power Company (I&M or the Company).

**Q3. Briefly describe your educational background and professional
experience.**

I graduated from the University of Akron in 1983, with a degree in Accounting,
and I am a Certified Public Accountant in the State of Ohio. I have also
participated in various management training and development programs,
including the AEP Management Development Executive Education program
provided by The Ohio State University Fisher College of Business.

In February 1984, I was hired by AEPSC as an assistant auditor with the
responsibility for conducting operational and financial audits of the various
AEPSC and third-party entities. In 1989, I joined the Contract Administration
department as a Contract Analyst where I was primarily responsible for the
negotiation and administration of our long-term coal supply agreements and fuel
data reporting system for the AEP East Operating Companies.

1 I joined the Procurement department as a Coal Procurement Agent in 1995
2 where I was responsible for the coal procurement and inventory management of
3 various AEP subsidiaries, including Ohio Power Company (OPCo), Columbus
4 Southern Power Company, Kentucky Power Company (KPCo), and as agent for
5 Ohio Valley Electric Company (OVEC) and Indiana Kentucky Electric
6 Corporation (IKEC). I held various positions of increasing responsibility in the
7 Procurement department.

8 In 2009, I moved into the Transportation and Logistics section of Fuel
9 Procurement as the Manager of Marketing, Transportation and Logistics and
10 was responsible for all of the transportation and logistics functions including
11 contract negotiations with the various transportation providers and managing the
12 day-to-day deliveries to all of the AEP Power Plants. In May of 2018, I was
13 promoted to my current role.

14 **Q4. What are your responsibilities as Director – Coal, Transportation, and**
15 **Reagent Procurement?**

16 I am responsible for the oversight of all coal and reagent procurement, contract
17 negotiation, and inventory management for the AEP operating companies,
18 including I&M, KPCo, Southwestern Electric Power Company (SWEPCO),
19 Public Service Company of Oklahoma (PSO), Appalachian Power Company
20 (APCo), Wheeling Power Company (WPCo), and as an agent for OVEC and
21 IKEC. I am also responsible for the oversight of all rail, barge, truck, and
22 transloading agreements.

23 **Q5. Have you previously testified before any regulatory commissions?**

24 Yes, I have submitted testimony before the Indiana Utility Regulatory
25 Commission on behalf of I&M in Cause Nos. 38702 FAC-80 through FAC-90. I
26 have also submitted testimony to the Michigan Public Service Commission on
27 behalf of I&M; the Oklahoma Corporation Commission on behalf of PSO; the
28 Public Utility Commission of Texas on behalf of SWEPCO; the Kentucky Public

1 Service Commission on behalf of KPCo; and the Public Service Company of
2 West Virginia on behalf of APCo and WPCo.

3 **Q6. What is the purpose of your testimony?**

4 The purpose of my testimony is to:

- 5 • compare the forecast and actual delivered coal costs for December 2022
6 through May 2023 (Reconciliation Period);
- 7 • discuss the current coal market conditions and environmental
8 requirements at Rockport Plant (Rockport);
- 9 • address I&M's coal delivery forecast for November 2023 through April
10 2024 (Forecast Period);
- 11 • summarize I&M's long-term coal supply agreements; and
- 12 • describe I&M's coal purchasing strategy and how the Company
13 addresses inventory issues.

I. Rockport's Coal Requirements and Incurred Fuel Cost

14 **Q7. Please identify and describe I&M's coal generating station.**

15 I&M's Rockport coal-fired electric generating station (Rockport or Plant)
16 operated during the Reconciliation Period and is projected to receive coal
17 deliveries during the entire Forecast Period. The station is located in Spencer
18 County, Indiana, and consists of two 1300-megawatt coal-fired generating units.

19 The New Source Performance Standard (NSR) and the U.S. Environmental
20 Protection Agency (EPA) Mercury and Air Toxics Standards (MATS) limit the
21 emissions at Rockport. The NSR limits sulfur dioxide (SO₂) emissions at
22 Rockport to 0.15 lbs. SO₂ per Million British Thermal Unit (MMBtu) on a 30-day
23 rolling average basis with a maximum limit of 10,000 SO₂ tons per year.

I&M complies with the emission limit by using a blend consisting primarily of Powder River Basin (PRB) low-sulfur subbituminous coal from Wyoming ($\leq .65$ lbs SO₂ per MMBtu) along with low-sulfur bituminous coal from various Central Appalachian (CAPP) sources. The MATS rule limits emissions at Rockport for mercury, acid gases, and other hazardous air pollutants. Dry Sorbent Injection (DSI) technology and Activated Carbon Injection (ACI) are being utilized to meet these MATS emission limits.

The DSI system uses sodium bicarbonate to reduce emissions of acid gases, the ACI system uses brominated activated carbon to reduce emissions of mercury, and an electrostatic precipitator ensures compliance with hazardous air pollutant limits that are measured via particulate matter emission limits. The use of DSI and ACI technology has not required a change in the coal blend utilized at Rockport.

Q8. How did Rockport's actual delivered costs compare to the forecasted costs during the Reconciliation Period?

During the Reconciliation Period, the overall weighted average delivered cost of coal for the Rockport plant from all sources was forecast to be \$64.92/ton or 366.76 cents/MMBtu. The actual delivered cost was \$47.19/ton or 263.18 cents/MMBtu. This variance is detailed in *Figure JCD-1*:

Figure JCD-1. Actual vs. Forecast Variances

	<u>Variance (\$/ton)</u>	<u>Percentage (%)</u>
Tons (000)	55	2.45
FOB Mine	(2.56)	(14)
Transportation	(15.17)	(32)
Delivered	(17.73)	(27)
¢ / mmBTU	(103.58)	(28)

The FOB Mine cost decreased primarily due to the fact that only 8,000 tons of high cost CAPP coal was received during the period in lieu of 86,000 tons that

1 was originally forecasted. For additional market details, see section IV, Current
2 Market Conditions. The Transportation cost decreased primarily due to a
3 combination of the transloading cost at CCT and the rail cost to CCT. The
4 forecasted transloading price for CCT was \$17.51/ton, however, the actual CCT
5 transloading price was \$4.80/ton. Additionally, the Union Pacific Rail Agreement
6 allows for rail rate discounts based on the price of Natural Gas. A rail rate
7 discount was received for the months of March through May 2023 that
8 amounted to \$3.8 million, which reduced the actual rail rate paid.

II. Forecast Fuel Cost and Methodology

9 **Q9. Please provide a summary of I&M's coal supply agreements in effect**
10 **during the Forecast Period.**

11 JCD-2 shows the coal supply agreements effective during the Forecast Period
12 and the committed tonnages of coal associated with those agreements for
13 calendar year 2023 and 2024.

Figure JCD-2. Committed contractual tons ^a

Figure JCD-3. Contract	Basin	2023 Contract Obligation	2024 Contract Obligation
1 ^b	PRB	750,000	-
2 ^c	PRB	200,000	1,000,000
3 ^d	PRB	340,000	-
4 ^e	PRB	69,000	-
5 ^f	PRB	750,000	-
6 ^g	PRB	2,000,000	2,000,000
7 ^h	PRB	-	400,000
8 ⁱ	PRB	-	400,000
9 ^j	CAPP	50,000	50,000

14 ^a Committed contracts reflect total tons under obligation for each supplier for the Rockport plant and are not unit specific. Tons are assumed to be split 50/50 for 2023 & 2024 for Units 1 and 2.

^b Contract Term is July 2022 through December 2023.

c Contract Term is October 2022 through December 2025. Contract obligation for 2022 and 2023 is 875,000 and approximately 675,000 tons was in shipped in 2022 with the remaining obligation of 200,000 tons to be shipped in 2023.

d Contract Term is January 2022 through December 2023. Contract obligation is 515,000 and approximately 175,000 tons was shipped in 2022 with the remaining obligation of 340,000 tons to be shipped in 2023.

e Contract Term is from August 2022 through March 2023 for a total of 225,000 tons. Approximately 156,000 were shipped in 2022.

f Contract term is January 2023 through December 2023.

g Contract term is January 2023 through December 2024.

h Contract term is January 2024 through December 2024.

i Contract term is January 2019 through December 2024. There were no obligations under this contract for 2023.

j Contract term is January 2023 through December 2024.

1 Additional coal requirements that are not already committed will be purchased,
2 as necessary, to fulfill any remaining supply requirements at Rockport.

3 **Q10. What is the anticipated delivered cost of coal during the Forecast Period?**

4 *Figure JCD-3* shows the overall forecast weighted average delivered cost of
5 coal for Rockport from all sources during the Forecast Period is projected to be
6 \$52.47 per ton or 296.00 cents per MMBtu.

Figure JCD-3. Delivered cost of coal in Forecast Period

	<u>Amount (\$/ton)</u>
Tons (000)	1,888
FOB Mine	\$19.07
Transportation	\$33.39
Delivered	\$52.47
¢ / mmBTU	296.00

7 Projected coal deliveries and costs for the Forecast Period were used in the I&M
8 forecast supported by Company witness Sloan.

1 **Q11. How were the forecast deliveries and prices, as provided above,**
2 **determined for the Forecast Period?**

3 The amount of coal projected to be consumed was based on a load forecast
4 covering the Forecast Period. Coal delivery requirements were then determined
5 by considering coal inventory, forecasted coal consumption, and adjustments for
6 any contingencies that would necessitate an increase or decrease in coal
7 inventory levels.

8 Next, the sources of the coal were determined considering environmental and
9 boiler constraints, as well as contractual obligations and existing sources of
10 supply. The price of contract coal and committed spot market purchases are
11 based on contractual agreements. Uncommitted coal, when necessary, is priced
12 from the forecasted future coal market prices or forward curve.

13 Finally, transportation costs were forecast based on the existing railroad
14 transportation agreements and projected barging, railcar, and transloading
15 rates.

III. Purchasing Strategy

16 **Q12. Please describe I&M's coal purchasing strategy.**

17 I&M's coal purchasing strategy is based on continuous market monitoring and
18 evaluation along with periodic competitive bids. Rockport's coal requirements
19 are frequently updated and reviewed and new supply agreements are
20 strategically layered into the existing portfolio in order to gradually increase the
21 committed position. The selection of new supply agreements is primarily based
22 on price and coal quality considerations from competitive bid results and/or
23 existing opportunities.

1 **Q13. Has I&M modified its coal procurement practices since FAC-90 with**
2 **Rockport 2 going merchant?**

3 No. Coal will be purchased on a total Plant basis. Projected purchases will then
4 be apportioned based on the forecasted burn for each of the units. For 2023 and
5 2024 as well as going forward, the forecasted burn showed that purchases
6 would be split between the units on an approximate 50/50 basis.

7 **Q14. Will there be a separate physical pile for Rockport 2?**

8 No. As discussed in FAC-90 there will only be one physical pile, however, the
9 piles will be accounted for separately on the Company's books.

10 **Q15. Is risk assessment of potential suppliers an important factor in I&M's coal**
11 **purchasing decisions?**

12 Yes. I&M considers a vendor's financial status, ability to deliver and past
13 performance when evaluating its decision to do business with that supplier.
14 Purchases from reliable vendors serve to enhance I&M's supply security.

IV. Current Market Conditions

15 **Q16. Describe the market price for coal during the Reconciliation Period**
16 **including availability and any associated challenges?¹**

17 Domestic and global coal prices began falling off in the back half of 2022, after
18 hitting all-time highs in late 2021 and early to mid Calendar Year 2022, and have

¹ Market prices for CAPP coal reference the *Argus Coal Daily Market Price Bulletin*, NYMEX-spec barge 12,000 < 1%, Prompt quarter.

Market prices for PRB coal reference the *Argus Coal Daily Price Bulletin*, fob mine/rail 8,800 0.8, Prompt quarter for coal loading on the joint rail line in the southern Powder River Basin.

1 continued the downward trend into 2023 due to decreases in natural gas and
2 power prices and limited export demand.

3 CAPP coal prices started 2022 at \$80.25 per ton and continued to increase until
4 September 2022 at an all-time high of over \$200.00 per ton due to high demand
5 and tight supply. Since September 2022, with natural gas and power prices
6 coming off, demand for the CAPP coal and consequently CAPP coal prices,
7 decreased to approximately \$155.00 per ton by the end of 2022. During
8 Calendar Year 2023, prices have continued to come off with high inventories at
9 most utilities, limited export demand and no domestic winter demand and as of
10 the end of May 2023 closed at \$79.50 per ton.

11 At this time, with adequate inventory, no additional CAPP coal is forecasted to
12 be purchased beyond the current commitments of 50,000 tons per year in
13 Calendar Year 2023 and 2024, which will be used to get to maximum load when
14 required by PJM or when market conditions would dictate. Forward market
15 prices show CAPP coal relatively flat over the foreseeable future.

16 PRB coal prices started 2022 at \$27.30 per ton and came down throughout
17 2022 ending December 2022 at approximately \$15.15 per ton. During Calendar
18 Year 2023, prices continued to come down closing at \$14.30 per ton as of the
19 end of May 2023, again driven primarily due to high inventories at most utilities,
20 limited export demand, and no domestic winter demand. Forward market prices
21 also show PRB coal relatively flat over time.

22 Throughout 2022, all the Class I railroads were restricting the number of railcar
23 sets that could be put in service due to the rail labor issues. Additionally,
24 throughout 2022 there was a real threat of a domestic rail strike that took
25 government intervention to avoid which caused issues with the purchase and
26 delivery of fuel. Since the end of 2022, the railroad issues have subsided and
27 labor and capacity are no longer a concern.

Q17. Please describe the current inventory situation at Rockport.

As of May 30, 2023, I&M had 2,449,000 tons (83 days) of sub-bituminous PRB coal (including CCT) and 193,000 tons (44 days) of bituminous CAPP coal at Rockport.

Q18. Did the volatility in the energy market lead I&M to use Decrement or Increment Pricing during the Reconciliation Period?

No. There was no decrement or increment pricing used during the reconciliation period.

Q19. Has the forecast for coal requirements changed over the last year?

Yes. The forecasted forward power and natural gas prices have decreased significantly since November 2022 as compared to May 2023, which has resulted in consumption being significantly reduced as shown below in Figure JCD-4:

Figure JCD-4 Forecasted Market Prices

	Forecasted ¹	Actuals ²	Forecasted ²
	Cal Year 2023	Jan-May 2023	June-Dec 2023
AEP- Dayton Day Ahead LMP's	\$70.78	\$30.62	\$37.09
Henry Hub Natural Gas Price	\$ 5.70	\$ 2.45	\$ 2.57
Forecasted/Actual Consumption ³	6.38mm	367k	2.068mm

¹ As of November 30, 2022

² As of May 31, 2023

³ Forecasted/Actual Consumption reflects both Rockport Units

1 **Q20. How does the Company address such fluctuations in the forecasts and**
2 **potential inventory concerns?**

3 The Company considers various options including, renegotiating agreements,
4 storing coal at third party locations, buying out of contract volumes, in addition to
5 decrementing the units. The final option selected is determined based on the
6 least cost.

7 With the current inventory levels and projected low natural gas and power
8 prices, inventories are expected to continue to increase. With the limited
9 storage availability, I&M has initiated discussions with some of its suppliers to
10 restructure the agreements in an effort to provide volume flexibility during this
11 projected period of lower demand in the market. These discussions are in the
12 initial stages and an update will be provided during FAC-92.

13 **Q21. Does the coal forecast reflect the use of any increment or decrement**
14 **pricing?**

15 Yes. I&M's coal forecast includes the variable costs related to contractual costs
16 for committed coal and transportation agreements, market prices for
17 uncommitted open positions, any contractual escalations, and any transloading
18 or handling costs that the Company is projected to incur. Additionally, the
19 current forecast includes a coal pile management program to manage inventory
20 concerns by utilizing decrement pricing. As discussed above, I&M is currently in
21 discussions with some of its coal suppliers to restructure their agreements to
22 provide for flexibility, given the current market dynamics. Depending upon the
23 outcome of these discussions, decrement pricing may or may not be needed.

24 **Q22. Please describe the Company's coal procurement strategy given the**
25 **forecast assumptions.**

26 The Companies' coal procurement strategy is not tied solely to the coal delivery
27 forecast provided to the Production Costing group to develop the forecast filed in

1 this case. As described by Company witness Sloan, the forecast was used to
2 determine the forecasted cost of fuel consumed at the Companies' coal plants,
3 as computed by the PLEXOS simulation model, for the Forecast Period of
4 November 1, 2023 through April 30, 2024. The strategy for actual coal
5 procurement is not static; rather it is based on periodic updates of the forecast
6 and continuous market monitoring and evaluation, all of which help to determine
7 when to issue RFPs or to make prompt purchases from the market when coal is
8 available. The purchasing needs are determined over time based on the
9 periodic updates of the forecasts, the monthly consumption forecasts, and
10 current inventory levels. At the time of the forecast, given the market conditions
11 and current contractual coal supply obligations, it was reasonable to include
12 decrement pricing in the forecast.

13 **Q23. Have there been any changes to the coal supply blend at Rockport?**

14 No. I&M continues to utilize a higher blend of PRB coal as operating and market
15 conditions dictate.

16 **Q24. Are I&M's coal costs reasonable as incurred during the Reconciliation**
17 **Period and as projected during the Forecast Period?**

18 Yes. I&M has and continues to prudently manage its coal supplies, and procure
19 coal, coal-related transportation, and consumables at the lowest delivered
20 reasonable cost.

21 **Q25. Does this conclude your pre-filed verified direct testimony?**

22 Yes.

VERIFICATION

I, Jeffrey C. Dial, Director – Coal, Transportation, and Reagent Procurement, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information, and belief.

Date: JULY 27, 2023

A handwritten signature in cursive script, reading "Jeffrey C. Dial", written over a horizontal line.

Jeffrey C. Dial