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INDIANA MICHIGAN POWER COMPANY

38702 FAC-92

PRE-FILED VERIFIED DIRECT TESTIMONY

OF

KIMBERLY K. CHILCOTE

**OFFICIAL
EXHIBITS**

**DIRECT TESTIMONY OF KIMBERLY K. CHILCOTE
ON BEHALF OF
INDIANA MICHIGAN POWER COMPANY**

Q1. Please state your name and business address.

My name is Kimberly K. Chilcote. 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 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 Dayton in 1992 with a Bachelor of Chemical
Engineering Degree. I joined AEP in 1992 as an Assistant Chemist at Columbus
Southern Power Company's (CSP) Conesville Plant. In 2004, I transferred to
the fuels group as a Coordinator and was primarily responsible for assessing
and reviewing the coal qualities of the coal purchased by the procurement
department. In 2007, I transferred to the Fuel Procurement group and was
responsible for the purchase of all Powder River Basin Coal for the AEP System
power plants. In 2008, I became responsible for purchasing coal for CSP and
Ohio Power Company, which merged to become AEP Ohio. In 2010, I was
promoted to Manager of Coal Procurement for AEP Ohio and Kentucky Power
Company. In 2014, I joined AEP Generation Resources with responsibilities for
purchasing coal, natural gas and consumables for AEP's unregulated plants. In

1 2020, I accepted a position in the regulated Commercial Operations
2 organization in the coal and reagents transportation team. In May of 2021 I was
3 promoted to Coal Procurement Manager and most recently to Director – Coal
4 and Reagent Procurement in October 2023.

5 **Q4. What are your responsibilities as Director – Coal and Reagent**
6 **Procurement?**

7 I am responsible for the oversight of all coal and reagent procurement, contract
8 negotiation, and inventory management for the AEP operating companies,
9 including Indiana Michigan Power Company (I&M), Appalachian Power
10 Company (APCo), Kentucky Power (KPCo), Public Service Company of
11 Oklahoma (PSO), Southwestern Electric Power Company (SWEPCO), Wheeling
12 Power Company (WPCo), and as an agent for OVEC and IKEC.

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

14 Yes, I have previously provided written testimony and testified at hearings
15 before the Public Service Commission of Kentucky on behalf of KPCo, the
16 Virginia S.C.C. on behalf of APCO, and before the West Virginia Public Service
17 Commission on behalf of APCo/WPCo.

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

19 The purpose of my testimony is to:

- 20 • compare the forecast and actual delivered coal costs for June 2023
21 through November 2023 (Reconciliation Period);
- 22 • discuss the current coal market conditions and environmental
23 requirements at Rockport Plant (Rockport);
- 24 • address I&M's coal delivery forecast for May 2024 through October 2024
25 (Forecast Period);
- 26 • summarize I&M's long-term coal supply agreements; and

- describe I&M's coal purchasing strategy and how the Company addresses inventory issues.

I. Rockport's Coal Requirements and Incurred Fuel Cost

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

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

The New Source Performance Standard (NSR) and the U.S. Environmental Protection Agency (EPA) Mercury and Air Toxics Standards (MATS) limit the emissions at Rockport. The NSR limits sulfur dioxide (SO₂) emissions at Rockport to 0.15 lbs. SO₂ per Million British Thermal Unit (MMBtu) on a 30-day rolling average basis with a maximum limit of 10,000 SO₂ tons per year. The MATS rule limits the emissions at Rockport for mercury, acid gases, and other hazardous air pollutants.

I&M complies with the NSR SO₂ emission limit by using a blend of coal consisting primarily of Powder River Basin (PRB) low-sulfur subbituminous coal from Wyoming ($\leq$.65 lbs SO₂ per MMBtu) with low-sulfur bituminous coal from Central Appalachian (CAPP) sources. To meet the MATS emission limits the Plant uses Dry Sorbent Injection (DSI), Activated Carbon Injection (ACI) and an electrostatic precipitator. 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 the electrostatic precipitator ensures compliance with hazardous air pollutant limits that are measured via particulate matter emission limits. The use of DSI and ACI technology to reduce emissions 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 \$62.66/ton or 354.20 cents/MMBtu. The actual delivered cost was \$55.02/ton or 306.90 cents/MMBtu. This variance is detailed in 0:

Figure KKC-D1. Actual vs. Forecast Variances

	<u>Variance (\$/ton)</u>	<u>Percentage (%)</u>
Tons (000)	(848)	(40.78)%
FOB Mine	\$3.97	23.03%
Transportation	\$(11.60)	(25.5)%
Delivered	\$(7.63)	(12.2)%
¢ / mmBTU	\$(46.44)	(13.1)%

The FOB Mine cost increased primarily due to the fact that the Company received approximately 7,200 more tons of higher cost CAPP coal than what was originally forecasted. The Transportation cost decreased primarily due to a combination of the transloading cost at CCT and the rail cost to CCT. The forecasted transloading price for CCT was \$17.55/ton, however, the actual CCT transloading price was \$6.79/ton. Additionally, the Union Pacific Rail Agreement allows for rail rate discounts based on the price of Natural Gas. A rail rate discount was received for the months of March through May 2023 that amounted to \$3.3 million, which reduced the actual rail rate paid.

II. Forecast Fuel Cost and Methodology

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

KKC-D2 shows the coal supply agreements effective during the Forecast Period and the committed tonnages of coal associated with those agreements.

Figure KKC-D2. Committed contractual tons ^a

Contract	Basin	2024 Contract Obligation
1	PRB	400,000
2 ^b	PRB	210,000
3	PRB	1,000,000
4	PRB	2,000,000
5	PRB	400,000
6	CAPP	50,000

^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 2024 for Units 1 and 2.

^b Committed contractual tons for this contract are expected to be delivered between the months of January through June 2024.

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

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

KKC-D3 shows the overall forecast weighted average delivered cost of coal for Rockport from all sources during the Forecast Period is projected to be \$51.06 per ton or 290.73 cents per MMBtu.

Figure KKC-D3. Delivered cost of coal in Forecast Period

	<u>Amount (\$/ton)</u>
Tons (000)	2,001
FOB Mine	\$16.42
Transportation	\$34.65
Delivered	\$51.06
¢ / mmBTU	290.73

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

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

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

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

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

18 **Q12. Describe the strategy to develop the coal forecast.**

19 I&M's coal forecast includes the variable costs related to contractual costs for
20 committed coal and transportation agreements, market prices for uncommitted

1 open positions, contractual escalations if applicable, and any transloading or
2 handling costs that the Company is projected to incur in the forecast period.

3 **Q13. Does the coal forecast reflect the use of strategies to balance inventory?**

4 Yes. The current forecast includes a coal pile management strategy to manage
5 and limit inventory to maximum safe levels as needed.

III. Purchasing Strategy

6 **Q14. Please describe I&M's coal purchasing strategy.**

7 I&M's coal purchasing strategy is based updates of forecasts, review of monthly
8 consumption data, current inventory levels, and monitoring and evaluating the
9 coal market, all of which help to determine when to issue RFPs or to make
10 prompt purchases from the market. New supply agreements are strategically
11 layered into the existing portfolio to gradually increase the committed position.
12 The selection of new supply agreements is primarily based on price and coal
13 quality considerations from competitive bid results and/or existing opportunities.

14 The Companies' coal procurement strategy is not tied solely to the coal delivery
15 forecast provided to the Production Costing group to develop the forecast filed in
16 this case. As described by Company witness Sloan, the forecast was used to
17 determine the forecasted cost of fuel consumed at the Companies' coal plant, as
18 computed by the PLEXOS simulation model, for the Forecast Period of May 1,
19 2024 through October 31, 2024 and includes inventory management.

20 **Q15. Has I&M modified its coal procurement practices since FAC-91?**

21 No. Coal will be purchased on a total Plant basis. Projected purchases will then
22 be apportioned based on the forecasted burn for each of the units. For 2023 and

1 2024 as well as going forward, the forecasted burn showed that purchases
2 would be split between the units on an approximate 50/50 basis.

3 **Q16. Is risk assessment of potential suppliers an important factor in I&M's coal**
4 **purchasing decisions?**

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

IV. Current Market Conditions

8 **Q17. Describe the market price for coal during the Reconciliation Period**
9 **including availability and any associated challenges?¹**

10 During Calendar Year 2023, prices have continued to decline with high
11 inventories at most utilities, limited export demand, low natural gas prices and
12 little domestic winter demand in 2023. CAPP barge coal prices began 2023 at
13 \$144.00 per ton and had declined to \$75.00 at the end of November 2023. At
14 this time, with adequate inventory, no additional CAPP coal is forecasted to be
15 purchased beyond the current commitments of 50,000 tons in Calendar Year
16 2024. This CAPP coal will be used to get to maximum load when required by
17 PJM or when market conditions would dictate. Forward market prices show
18 CAPP coal relatively flat over the foreseeable future.

19 During Calendar Year 2023, PRB prices continued to decrease closing at
20 approximately \$14.00 per ton as of the end of November 2023, again driven
21 primarily due to high inventories at most utilities, low gas prices, renewable

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

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

1 generation, and limited domestic winter demand. Forward market prices also
2 show PRB coal relatively flat over time.

3 **Q18. Please describe the current inventory situation at Rockport.**

4 As of November 30, 2023, I&M had 1,988,202 tons (55 days) of sub-bituminous
5 PRB coal (including CCT) and 177,109 tons of bituminous CAPP coal at
6 Rockport.

7 **Q19. Did the volatility in the energy market lead I&M to use Decrement or**
8 **Increment Pricing during the Reconciliation Period?**

9 No. Decrement pricing was not used during the reconciliation period. The use of
10 must running was used for testing, fuel inventory management and near-term
11 economics. Company witness Johnston further discusses the use of this
12 strategy.

13 **Q20. Has the forecast for coal requirements changed since the time of the**
14 **forecast in 2022?**

15 Yes, both power and natural gas prices have decreased since the consumption
16 for calendar year 2023 was forecast in 2022. A comparison of 2023 actuals to
17 the 2023 forecast shows a decrease of approximately 47%. The forecast shows
18 a consumption of approximately 2.9M tons from January through December
19 2023 while the actual consumption has been approximately 1.6M tons for that
20 same time.

21 **Q21. How has the Company addressed the difference between the forecast and**
22 **the actual consumption at Rockport?**

23 The Company considered several options including, filling the inventory at
24 Rockport and Cook Terminal to maximum levels, renegotiating agreements, and

1 decrementing the units. All of the options were reviewed, and the options were
2 chosen in the order of least cost to I&M.

3 I&M choose first to use the available inventory space at both Rockport and Cook
4 Terminal. Once the inventory space was filled I&M reviewed other methods to
5 reduce the commitments for 2023. I&M was able to work with two suppliers to
6 amend contracts and to defer tons to future periods.

7 **Q22. Please briefly describe the terms of the amended contracts that defers**
8 **tons into future periods.**

9 I&M worked with two suppliers to amend two separate contracts. The first
10 contract provides for 750,000 tons to be deferred from 2023 into 2024, 2025 or
11 2026 for a fee. If the tons are delivered in 2024 or 2025 there is no additional
12 \$/ton cost, however, if delivered in 2026 the \$/ton is increased by a mutually
13 agreed amount of its original cost.

14 The second contract allows for the deferral of 210,000 tons of coal from 2023
15 into 2024 for a nominal increase per ton of its original cost.

16 **Q23. Were these the least cost options?**

17 Yes. The deferral of tons were the least cost option for I&M and its customers.
18 By negotiating with the two suppliers, the Company was able to avoid
19 approximately \$3-3.7 million dollars in additional cost for the necessary
20 investment required to add storage via expansion at CCT or by using a third
21 party supplier.

22 **Q24. Have there been any changes to the coal supply blend at Rockport?**

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

1 **Q25. Are I&M's coal costs reasonable as incurred during the Reconciliation**
2 **Period and as projected during the Forecast Period?**

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

6 **Q26. Does this conclude your pre-filed verified direct testimony?**

7 Yes.

VERIFICATION

I, Kimberly K. Chilcote, Director – Coal 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: 1/25/2024 | 7:05 AM PST

DocuSigned by:
Kimberly K. Chilcote
B58713501272402

Kimberly K. Chilcote