

PETITIONER'S EXHIBIT 3

IURC CAUSE NO. 38707-FAC134
DIRECT TESTIMONY OF JAMES J. McCLAY, III
FILED OCTOBER 31, 2022

**TESTIMONY OF JAMES J. McCLAY, III
MANAGING DIRECTOR OF NATURAL GAS TRADING
DUKE ENERGY CORPORATION
ON BEHALF OF
DUKE ENERGY INDIANA, LLC
CAUSE NO. 38707-FAC 134 BEFORE THE
INDIANA UTILITY REGULATORY COMMISSION**

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is James J. McClay, III, and my business address is 526 South Church
3 Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed as Managing Director of Natural Gas Trading for Duke Energy
6 Corporation ("Duke Energy").

7 **Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL
8 BACKGROUND.**

9 A. I received a Bachelor's Degree in Business Administration, majoring in Finance
10 from St. Bonaventure University. I joined Progress Energy in 1998 as the
11 Manager of Power Trading and held that position through early 2003 and then
12 became the Director of Power Trading and Portfolio Management for Progress
13 Energy Ventures through February 2007. From March 2007 through late 2008, I
14 was the Director of Power Trading for Arclight Energy Marketing. From March
15 2009 through the present, I've been employed in various managerial roles at
16 Progress Energy and Duke Energy overseeing Natural Gas Trading and

JAMES J. McCLAY, III

1 Origination, Pipeline Transportation, Power Trading, Oil procurement, and
2 various jurisdictions' hedging programs. Prior to my tenure with Duke Energy, I
3 was employed for approximately 13 years in Capital Markets as a U.S.
4 Government fixed income securities trader with various banks and
5 brokers/dealers.

6 **Q. WHAT ARE YOUR DUTIES AND RESPONSIBILITIES AS MANAGING**
7 **DIRECTOR OF NATURAL GAS TRADING, AS THEY RELATE TO**
8 **DUKE ENERGY INDIANA, LLC (“DUKE ENERGY INDIANA” OR**
9 **“COMPANY”)?**

10 A. As Managing Director of Natural Gas Trading, I manage the organization
11 responsible for the natural gas trading, optimization and scheduling functions for
12 the regulated gas-fired generation assets in the Carolinas (Duke Energy Carolinas
13 and Duke Energy Progress), Duke Energy Florida, Duke Energy Indiana and
14 Duke Energy Kentucky (collectively, the “Utilities”), as well as the organization
15 responsible for power trading for Duke Energy Indiana and Duke Energy
16 Kentucky. Additionally, I oversee the execution of the Utilities' financial
17 hedging programs, fuel oil procurement, and emissions trading.

18 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
19 **PROCEEDING?**

20 A. I will provide an update on the Company's gas and power hedging activities that
21 have been described in previous FAC proceedings. I will also provide testimony

1 on the status of discussions with the parties regarding possible changes to Duke
2 Energy Indiana's hedging plan.

3 **II. REALIZED NATIVE NATURAL GAS HEDGING RESULTS**

4 **Q. DO YOU BELIEVE THAT IT IS REASONABLE FOR THE COMPANY**
5 **TO ENTER INTO HEDGES AGAINST GAS PRICES?**

6 A. Yes, I do.

7 **Q. PLEASE EXPLAIN WHY YOU BELIEVE THAT SUCH ACTIONS ARE**
8 **REASONABLE.**

9 A. Duke Energy Indiana continues to rely on natural gas as fuel for the Company's
10 gas generation plants and natural gas prices have historically been volatile. From
11 March 2006 through August 2022, prompt month Henry Hub natural gas prices
12 have settled between \$1.44 and \$13.58 per Mmbtu. As of July 11, 2022, prompt
13 month natural gas contract settled at \$6.47/Mmbtu. This is a sizable pullback
14 from \$9.344/Mmbtu, the highest price of last 14 years, reached on June 7, 2022,
15 but it's much higher than recent low price of \$3.59/Mmbtu settled on
16 December 30, 2021. In addition, in the past ten years, spot daily market
17 supply/demand imbalances had created occasionally significant short-term price
18 spikes in some locations during high demand seasons. Furthermore, because
19 Duke Energy Indiana's natural gas demand is somewhat linked to weather, the
20 Company is further exposed to such fluctuations in natural gas prices. The natural
21 gas market is highly visible and liquid and there are a number of hedging tools

1 available to help protect against such price fluctuations. In my opinion, it makes
2 sense for the Company to take advantage of these tools.

3 **Q. HAS THE COMPANY COMPLETED ANY GAS HEDGING**
4 **TRANSACTIONS SINCE THE LAST UPDATE TO THE COMMISSION**
5 **IN THE FAC133 PROCEEDING?**

6 A. Yes. The Company used hedging products available on InterContinental
7 Exchange (“ICE”) and purchased hedges based on forecasted forward expected
8 native gas burns for the period from September 2022 through June 2023. As
9 discussed in FAC108 testimony, in addition to Henry Hub future contracts that
10 the Company uses to hedge gas exposure, Duke Energy Indiana uses two types of
11 financial future contracts to convert Henry Hub hedging trades to a hedging
12 position that settles at Chicago Citygate daily gas index. These financial products
13 help manage the price separation between Henry Hub and Chicago Citygate gas
14 price that may occur, due to locational differences and source of gas production.
15 The cost of natural gas the Company pays for its gas generation units now moves
16 more closely with Chicago Citygate daily gas index and sometimes disconnects
17 from Henry Hub price.

18 **Q. WHAT WERE THE RESULTS OF THE GAS HEDGING APPLICABLE**
19 **TO THE RECONCILIATION PERIOD FOR THIS FAC PROCEEDING?**

20 A. Natural gas purchases made to hedge June through August 2022 native gas burn
21 realized a gain of \$14,345,491. These gas hedges were purchased prior to the
22 summer 2022 peak demand season to reduce volatility and lock in certainty of

price, following the Duke Energy Indiana hedge plan. During this FAC reconciliation period, market price for gas realized higher than the hedged prices primarily due to strong price increases triggered by the Russian invasion of Ukraine.

Realized Native Natural Gas Hedging Results

June 2022	July 2022	August 2022
\$4,470,574	\$3,683,153	\$6,191,764

As with our past practice, the Company will evaluate gas burn needs regularly and may purchase gas hedges as needed and when it is prudent to do so.

Q. CONSISTENT WITH THE CONTRACT BETWEEN DUKE ENERGY INDIANA AND PURDUE UNIVERSITY RELATED TO THE PURDUE COMBINED HEAT AND POWER (“CHP”) FACILITY, ARE DUKE ENERGY INDIANA AND PURDUE CONSIDERING PLANS TO HEDGE NATURAL GAS EXPOSURE FROM THE STEAM SALES TO PURDUE?

A. Yes. As approved by the Commission in Cause No. 45276, the Steam Purchase and Sale Agreement (“Agreement”) specifically contemplates the Company and Purdue cooperatively agreeing to extend the fixed price of the steam sale. If extended, Duke Energy Indiana would hedge the term natural gas prices associated with the production of steam from the CHP. Under the Agreement, Duke Energy Indiana agreed to sell steam produced by the Purdue CHP based on the market price of natural gas. As part of the Agreement, the parties also agreed

1 that "Seller" (Duke Energy Indiana) would develop a hedging strategy for the fuel
2 used by the CHP for the production of steam:

3 Seller shall develop and implement a natural gas hedging strategy for the fuel
4 for the Facility's production of Unfired Steam and associated electricity,
5 subject to approval by the Indiana Utility Regulatory Commission, to the extent
6 such approval is required. Seller and Buyer shall meet periodically, but not less
7 than annually, to discuss such hedging strategy, and Seller agrees to consider
8 Buyer's input when developing and implementing its hedging strategy.

9 Agreement at p. 29.

10 Purdue contacted Duke Energy Indiana in July and asked to begin conversations
11 on the potential to hedge the natural gas used to produce steam under the
12 Agreement. The Company has identified the volume of expected natural gas
13 usage for producing steam and plans to purchase natural gas hedges for that
14 amount once the length of fixed sale price period has been agreed to by both
15 parties. Duke Energy Indiana will report back on any final decisions by the
16 parties in a future FAC.

17 **III. REALIZED NATIVE POWER HEDGING RESULTS**

18 **Q. DOES THE COMPANY CONDUCT OTHER HEDGING ACTIVITIES?**

19 A. Yes, Duke Energy Indiana also hedges the costs of purchased power. Power
20 prices have been volatile since the beginning of the Midcontinent Independent
21 System Operator, Inc. ("MISO") energy markets in April of 2005. Through the
22 end of August 2022, the average peak daily Indiana Hub Day Ahead LMP was
23 \$44.58/MWH. For the same period, average daily Indiana Hub Real Time LMP
24 was \$43.28/MWH. However, there was a wide range of prices. Day Ahead daily
25 price settled between \$17.83 and \$398.63 while Real Time price went from as

1 low as \$15.57/MWH to as high as \$298.68/MWH. There were 121 days where
2 Day Ahead daily price exceeded \$100/MWH and 126 days in the same period that
3 daily Real Time peak power prices reached above \$100/MWH. To help hedge
4 against this market volatility, if the position warrants, the Company enters into
5 forward power purchase contracts that are financially settled on a specific future
6 date at MISO Indiana Hub Day-Ahead or Real Time LMPs.¹ The applicable
7 LMPs on the settlement date for these contracts may be higher or lower than the
8 price the Company paid for the forward contract and the Company will either pay
9 or be refunded the difference.

10 **Q. WHAT PRICE DOES THE COMPANY PAY FOR THESE POWER**
11 **CONTRACTS?**

12 A. The Company paid the then current market price for the June 2022 on-peak
13 monthly forward contracts in the amount of \$48.63/MWH, \$33.28/MWH for June
14 2022 off-peak monthly contracts, \$135/MWH for July 2022 on-peak monthly
15 contracts, and \$135/MWH for August 2022 on-peak monthly contracts. In
16 addition, the Company put on short-term hedges and paid the then market prices
17 between \$52/MWH and \$112/MWH to hedge portfolio imbalances in daily and
18 weekly markets.

19 **Q. HOW IS IT DETERMINED WHETHER TO ENTER INTO FORWARD**
20 **POWER HEDGING TRANSACTIONS?**

¹ Since the onset of MISO energy markets, almost all bi-lateral contracts have been “financial” rather than “physical” contracts.

1 A. Duke Energy Indiana uses a forward power forecast generated by analytics to
2 determine a monthly forward power position. When entering into a hedge
3 transaction, Duke Energy Indiana measures the purchase price for the forward
4 power purchase contract against the expected cost of operating the incremental
5 Company generation units needed to meet the forecasted load. For example, if
6 our forecasted native load would require the Company to operate a gas turbine
7 peaking plant at a cost of \$100/MWH and we could purchase a forward power
8 purchase contract at a cost of \$80/MWH, Duke Energy Indiana would make that
9 purchase, essentially fixing a price for purchased power at a cost lower than the
10 expected cost of operating our own generation. The Company never makes a
11 forward power purchase unless the cost of such purchase is less than the cost of
12 running the incremental generating unit needed to meet the forecasted load.

13 If, on the settlement date, the LMP is higher than the forward contract
14 price, the Company would be credited the difference from the counterparty. On
15 the other hand, if the LMP is lower than the forward contract price, the Company
16 would have to pay the difference to the counterparty. The actual purchase of
17 power or dispatch of units to serve native load would still be done on an economic
18 basis.

19 **Q. WHEN DID THE COMPANY BEGIN THIS HEDGING PROGRAM?**

1 A. Duke Energy Indiana started making such purchases for January 2006, and made
2 forward power purchases for each month of 2006, and have generally continued
3 that practice to the present.²

4 **Q. WHAT WERE THE RESULTS FOR JUNE THROUGH AUGUST 2022?**

5 A. The final realized value of the native power hedges for this period was
6 \$12,470,670 positive, resulting from forward monthly transactions, intra-month
7 transactions, as well as any MISO virtual trades. The positive result was driven
8 by high realized power prices because of geopolitical concerns in Europe, as well
9 as continued disruptions in coal supply.

10 **Realized Native Power Hedging Results**

June 2022	July 2022	August 2022
\$12,436,137	(24,466)	\$58,999

11

12 As noted in the pre-filed testimony of Ms. Suzanne E. Sieferman, the net realized
13 results for the reconciliation period from the power hedging activity exclusive of
14 MISO virtual trades, and including prior period adjustments, was a gain of
15 \$12,456,9001 .

16 Including net realized results from native natural gas hedging mentioned
17 above, total hedging gains for this FAC filing are \$26,802,391.

² As noted later in my testimony, Duke Energy Indiana's power hedging practices subsequent to the effectiveness of a settlement with the Indiana Office of Utility Consumer Counselor and the Commission's Order on June 25, 2008, in Cause No. 38707-FAC68-S1 are consistent with such settlement and Commission Order.

1 **Q. IS THE COMPANY CONTINUING ITS POWER HEDGING**
2 **PRACTICES?**

3 A. Yes. Duke Energy Indiana made native purchases for September 2022 and June
4 2023 to hedge against expected purchased power. In addition, the Company made
5 intra-month purchases for September and October. The Company's methodology
6 for making purchases has remained consistent. If the forward purchase price of
7 power is less than the cost of running the incremental generating units required to
8 meet the forecasted load, then Duke Energy Indiana may purchase a forward
9 power hedge. Of course, forward power prices, gas prices, emission allowance
10 prices, weather conditions, expected load, and availability of generating units,
11 among other factors, are constantly changing. As conditions change, the
12 Company would evaluate these conditions and adapt. Using sophisticated
13 computer analysis, Duke Energy Indiana constantly assess the Company's
14 forward power positions on a monthly, daily and even intra-day basis. The goal is
15 to maintain forward power hedges only in an amount necessary to economically
16 cover our forecasted load.

17 **Q. HOW DID THE COMMISSION'S JUNE 25, 2008 ORDER IN CAUSE**
18 **NO. 38707 FAC68-S1 AFFECT THE COMPANY'S CURRENT HEDGING**
19 **METHODOLOGY?**

20 A. The Company's hedging methodology is consistent with the Settlement
21 Agreement with the OUCC and the Commission order. Accordingly, beginning
22 on August 1, 2008, Duke Energy Indiana has not utilized its flat hedging

1 methodology. Rather, Duke Energy Indiana will hedge up to approximately flat
2 minus 150 MW on a forward, monthly and intra-month basis, and up to
3 approximately flat on a Day Ahead/Real-Time basis. This methodology will
4 leave the Company with at least approximately 150 MW of expected load
5 unhedged on a forward forecasted basis.

6 **Q. IN THE COMMISSION'S SEPTEMBER 28, 2022 ORDER IN CAUSE**
7 **NO. 38707 FAC 133, THE PARTIES WERE INSTRUCTED TO MEET BY**
8 **NOVEMBER 28, 2022 TO DISCUSS POSSIBLE CHANGES TO**
9 **APPLICANT'S HEDGING PLAN. WHAT IS THE STATUS OF THOSE**
10 **DISCUSSIONS?**

11 A. The Company has reviewed its current hedging practices to determine if any
12 incremental improvements can be made. Duke Energy Indiana has scheduled an
13 initial conversation on October 31, 2022 with the OUCC and our industrial
14 customers to review and discuss potential changes to the hedging program.

15 **Q. DO YOU BELIEVE THE COMPANY'S GAS AND POWER HEDGING**
16 **PRACTICES ARE REASONABLE?**

17 A. Yes, I do. The Company never speculates on future prices, but rather uses a
18 sophisticated model to determine when it is economic to purchase and sell on a
19 forward basis. The practice is economic at the time the decision is made and
20 reduces volatility because Duke Energy Indiana is transacting in a less volatile
21 forward market, as opposed to more volatile spot markets (*i.e.*, the MISO day
22 ahead and real-time markets).

1 Just as an electric reserve margin reduces risk that capacity may not be
2 available when it is needed, Duke Energy Indiana believes its power hedging
3 practice benefits customers by reducing customers' risk of paying potentially
4 higher spot market prices. Further, as stated above, our practices going forward
5 will be consistent with the Commission Order in Cause No. 38707 FAC68-S1.

6 **Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?**

7 **A. Yes, it does.**

VERIFICATION

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

Signed: _____

A handwritten signature in black ink, appearing to read "James J. McElroy", is written over a horizontal line. The signature is stylized with a large initial "J" and a prominent "M".

Date: October 31, 2022