Cause No. 46038

On Behalf of Petitioner,
DUKE ENERGY INDIANA, LLC

VERIFIED DIRECT TESTIMONY OF JOHN A. VERDERAME

Petitioner's Exhibit 21

April 4, 2024

DIRECT TESTIMONY OF JOHN A. VERDERAME
VICE PRESIDENT OF FUELS & SYSTEMS OPTIMIZATION
DUKE ENERGY PROGRESS, LLC
ON BEHALF OF DUKE ENERGY INDIANA, LLC
BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John A. Verderame, and my business address is 525 South Tryon Street, Charlotte, NC 28202.

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

A. I am employed as Vice President of Fuels & Systems Optimization, Duke Energy Progress, LLC, a utility affiliate of Duke Energy Indiana, LLC ("Duke Energy Indiana" or "Company").

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I received a Bachelor of Arts degree in Economics from the University of Rochester in 1983, and a Master's in Business Administration in Finance from Rutgers University in 1985. I have worked in the energy industry for 23 years. Prior to that, from 1986 to 2001, I was a Vice President in the United States (US) Government Bond Trading Groups at the Chase Manhattan Bank and Cantor Fitzgerald. My responsibilities as a US Government Securities Trader included acting as the Firm's market maker in the US Government Treasury securities. I joined Progress Energy (now known as Duke Energy Progress, LLC) in 2001 as a Real-Time Energy Trader. My responsibilities as a Real-Time Energy

Trader included managing the real-time energy position of the Progress Energy regulated utilities. In 2005, I was promoted to Manager of the Power Trading group where I was responsible for the short-term capacity and energy position of the Progress Energy regulated utilities in the Carolinas and Florida. In 2012, upon consummation of the merger between Duke Energy Corp. and Progress Energy, I was named Managing Director, Trading and Dispatch. As Managing Director, Trading and Dispatch I was responsible for power and natural gas trading and generation dispatch on behalf of Duke Energy's regulated utilities in the Carolinas, Florida, Indiana, Ohio, and Kentucky. I assumed my current position in November 2019.

Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS VICE PRESIDENT OF FUELS & SYSTEMS OPTIMIZATION.

A. As Vice President of Fuels & Systems Optimization, I lead the organization responsible for the purchase and delivery of coal, natural gas, fuel oil, and reagents to Duke Energy's regulated generation fleet, including Duke Energy Indiana, LLC ("Duke Energy Indiana" or "Company").

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

A. I will discuss Duke Energy Indiana's fuel procurement strategy for coal, natural gas and fuel oil. I also support the Company's request to establish a representative balance of coal inventory into its base rates and then track the actual inventory balance, both up and down, in the Company's quarterly FAC filings.

II. FUEL PROCUREMENT

Q. PLEASE PROVIDE AN OVERVIEW OF DUKE ENERGY INDIANA'S FUEL PROCUREMENT STRATEGY.

A. Duke Energy Indiana has units that burn coal, natural gas and fuel oil.

Duke Energy Indiana's coal procurement policy is designed to assure that the Company procures a reliable supply of appropriate quality coal for its coal generating fleet at a reasonable cost. Coal is generally purchased under long-term contracts of one to three years in length. The Company secures both its long-term and spot (one year or less) coal supply from producers through competitive bid processes, which are evaluated thoroughly, considering coal quality, quantity, transportation alternatives, historic provider performance and financial viability and price. The producer (or producers) whose coal offers the best value, particularly with regard to overall utilization costs, is selected for further negotiations to produce contracts. The Company's long-term contracts may also contain provisions for periodic price adjustments or a mechanism to adjust prices based upon published market price indices.

To mitigate the risk of limited spot coal availability in 2021 and 2022 due to high demand, supplier and rail under performance and the overall inelasticity of the coal supply chain, the fuel procurement team executed a strategy of procuring longer term agreements at the upper end of the Company's forecasted procurement needs to offset the potential exposure to price and availability risk and to ensure reliability of supply.

For its natural gas units, Duke Energy Indiana has contracts for the purchase of gas supply, pipeline transportation, balancing and parking of natural gas needed for its generating stations.

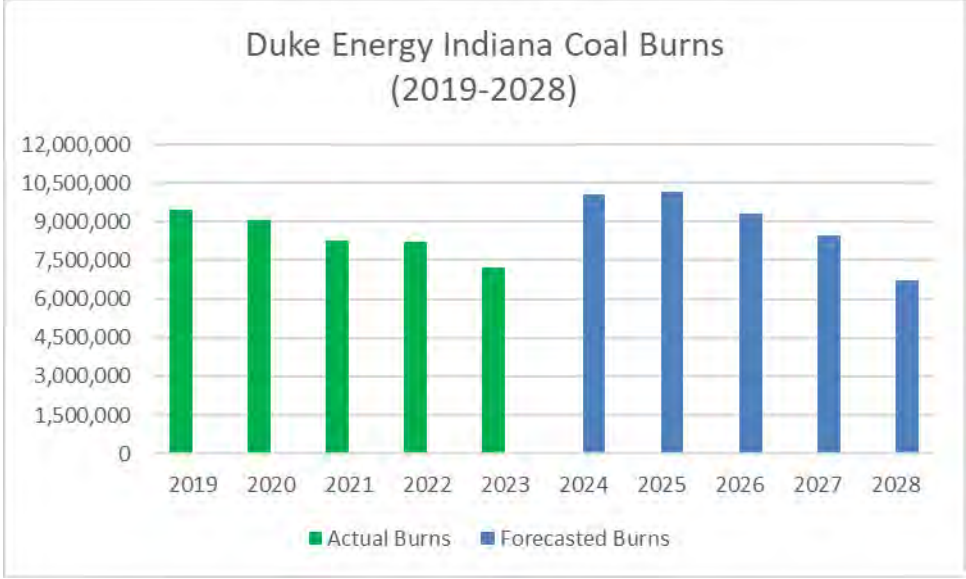
For its oil-fired units Duke Energy Indiana has one fuel oil supplier contract to provide fuel oil for its generating stations.

A. Coal

Q. HOW MUCH COAL DOES DUKE ENERGY INDIANA BURN ANNUALLY?

A. Historically, Duke Energy Indiana coal burn has averaged 8.4 million tons over the last five years and is projected to average 8.9 million tons over the next five years based on the mean stochastic forecast as of December 1, 2023. See Chart 1 below for the actual and projected annual burns.

CHART 1



Q. WHAT STEPS DOES DUKE ENERGY INDIANA UNDERTAKE TO ASSURE THAT IT IS PROCURING COAL AT THE LOWEST COST REASONABLY POSSIBLE?

A. The Company uses methods and strategies that ensure the lowest cost reasonably possible, including the use of staggered terms on long-term contracts, a diversified mix of suppliers, and contractual terms and conditions that provide price certainty and competitiveness. Duke Energy Indiana works to diversify its sourcing of suppliers and mines to ensure reliable supply and efficient transportation and works with suppliers to incorporate additional flexibility into the supply contracts. The Company's Coal Procurement Group stays informed as to the current market alternatives for spot and long-term coal supply through frequent communication with the coal producers and mining operations, coupled with, on-going monitoring of pricing information documented in industry publications such as industry newsletters, trade publications, regulatory filings, and the weekly spot market pricing indices published by brokers and traders.

Q. PLEASE DESCRIBE THE LATEST TRENDS IN COAL MARKET CONDITIONS.

A. The following are market price indications for relevant coal producing regions as of mid-January 2024, for delivery in 2024: High-sulfur Illinois basin coal prices are in the mid $40s per ton; Central Appalachia coal prices are in the high $70s per ton; Northern Appalachia coal prices are in the low $50s per ton; and Colorado coal prices are in the low $70s per ton.

Coal markets continue to experience a high degree of volatility due to a number of factors, including: (a) the inability of coal suppliers to respond timely to changes in demand resulting in periods of surplus and scarcity; (b) natural gas and power price volatility; (c) continued uncertainty regarding proposed and imposed US Environmental Protection Agency ("EPA") regulations for power plants; (d) global demand for both steam and metallurgical coal; (e) tightened access to investor financing; (f) continued shifts in production from thermal to metallurgical coal as producers move away from supplying declining electric generation to take advantage of increasing demand from industry; and (g) continued labor and resource constraints further limiting suppliers' operational flexibility. In addition, the coal supply chain experienced significant challenges throughout 2021 and 2022 as historically low utility stockpiles combined with rapidly increasing demand for coal, both domestically and internationally, made procuring additional coal supply increasingly challenging. Producers were largely unable to respond to this rapid rise in demand due to capacity constraints resulting from labor and resource shortages. These factors combined to drive both domestic and export coal prices to record levels by late 2021 and limited coal supply availability. Continued labor and resource constraints, including the on-going threat of a rail strike in Q4 2022, caused prices to remain elevated over the course of 2022. Over the course of 2023 published coal market prices declined from the historically elevated levels seen in 2021 and 2022 in response to demand pressure from low natural gas prices and lack of overall electric demand. Despite the decline in published coal market prices, the impacts of rising

production costs and demand side producer risk can manifest as volatility in delivered coal contract costs across individual mining operations.

Q. HOW DOES THE COMPANY ENSURE RELIABLE COAL SUPPLY?

A. For Duke Energy Indiana to provide a reliable source of electricity, an adequate inventory must be maintained to reliably manage coal burn volatility. The Company regularly evaluates market conditions, contract obligations, delivery options and forward projected burns to effectively manage projected monthly ending inventory balances. Given the inability of the coal supply chain to respond timely to rapid changes in coal demand that I discussed above, Duke Energy Indiana has executed a strategy of procuring longer term agreements utilizing the expected stochastic mean coal forecast as well incorporating the probabilistic outputs of the model at the forecasted 25th percentile and 75th percentile range of outcomes into its procurement planning process. Doing so enables the Company to create a procurement plan that includes the central 50 percent of the potential coal burn scenarios through the forecast period. In addition, Duke Energy Indiana has economically served its customers and successfully navigated extreme supply disruptions and now depressed energy markets with the utilization of a supply offer adjustment to avoid potentially higher cost inventory risks and solutions. At both ends of the inventory spectrum the Company has been able to proactively manage market constraints to economically and reliably serve customers, provide fuel security and mitigate exposure to price and availability risk by maintaining minimum and maximum coal inventory boundaries.

Q. WHAT DO YOU MEAN BY THE PHRASE "SUPPLY OFFER ADJUSTMENT"?

A. During 2021, Duke Energy Indiana instituted the use of a supply offer adjustment to ensure reliable levels of coal inventory to the benefit of its customers. The supply offer adjustment methodology proactively addresses factors that complicate the equilibrium of the coal supply and transportation chain and demand for coal generation in the power markets. The main factors that impact the supply offer adjustment are the reliability of the coal supply and transportation chain, and volatility of power and natural gas prices. The supply offer adjustment implemented by the Company is an empirical and repeatable modeling solution to account for these factors and to objectively balance dispatch economics in a dynamic and volatile energy market environment while also accounting for retaining a reliable amount of coal inventory for future peak periods. This methodology is in the best interest of customers because it provides economically driven fuel security.

Q. IS THE USE OF THE SUPPLY OFFER ADJUSTMENT IN THE BEST INTEREST OF THE COMPANY'S CUSTOMERS?

A. Yes. The supply offer adjustment methodology allows Duke Energy Indiana to dynamically manage inventory challenges resulting from volatile energy market conditions reliably and economically throughout the year. As energy market price volatility, coal inventory supply chain constraints, and shifting dynamics in the market fuel resource mix continue to impact coal inventories and fuel security, utilizing a dynamic supply offer adjustment methodology allows the Company to proactively protect customers from otherwise larger swings in fuel inventories over time and more impactful

reactions. Through the use of the adjustment, the Company is responding to today's challenges and improving coal inventory practices as well as preserving long term coal security in a methodological manner. The Company believes responding proactively to the issues that impact fuel inventory reliability is in its customers' best interests and expects to continue the utilization of the supply offer adjustment in its normal course of business.

Q. WHAT WAS THE SYSTEM INVENTORY BALANCE AS OF AUGUST 31, 2023?

A. At the end of August 2023, actual burns for the year were lower than projections due to mild weather coupled with lower than anticipated natural gas and power prices. System ending inventory balances were high but within established operation and safety tolerances. Duke Energy Indiana's coal inventories as of August 31, 2023, were approximately 2,938,568 tons (or 57 days of coal supply at a full load burn rate of 51,490 tons per day) across the system.

Q. WHAT IS THE SYSTEM INVENTORY BALANCE EXPECTED TO BE AS OF DECEMBER 31, 2025?

A. The forecasted coal inventory balance for Duke Energy Indiana as of December 31, 2025 is expected to be approximately 2,333,474 tons (or 45 days of coal supply at a full load burn rate of 51,490 tons per day). However, actual inventory levels will fluctuate due to factors such as: (1) weather driven demand; (2) plant availability; and (3) commodity price fluctuations.

Q. IS DUKE ENERGY INDIANA'S FORECASTED COAL INVENTORY BALANCE AT THE END OF THE 2025 FOREWARD-LOOKING TEST PERIOD REASONABLE?

A. Yes, it is. This coal inventory balance is consistent with Duke Energy Indiana's coal procurement and inventory management strategy. The Company's fuel inventory strategy is designed to balance the costs associated with maintaining coal inventory with the need to ensure reliable inventory balances. During periods of high peak demand, extreme weather, fuel transportation or mine production problems, this strategy reasonably ensures Duke Energy Indiana will have adequate fuel supplies on-hand to operate its generating units.

Q. WHAT STEPS IS THE COMPANY UNDERTAKING TO ACTIVELY MANAGE ITS COAL SUPPLY?

A. As part of calculating the supply offer adjustment, Duke Energy Indiana looks to first use market solutions to solve for volumetric build or depletion of the Company's inventory balances. As inventory balances dictate, the Company evaluates contractual options to reduce contractual obligations, defer, or store contract coal for future periods. In cases where actual burns unexpectedly increase above projections, the Company evaluates opportunities to accelerate contract deliveries and purchases of supply including exercising contractual flex options to increase contractual obligations as well as exercising spot purchases as available.

Q. BASED ON YOUR EXPERTISE, DO YOU HAVE AN OPINION AS TO WHETHER THE COMPANY IS BUYING COAL AT THE LOWEST PRICES REASONABLY POSSIBLE?

A. Yes. In my opinion, the Company is currently purchasing coal at prices as low as reasonably possible.

B. Natural Gas

Q. HOW MUCH NATURAL GAS DOES DUKE ENERGY INDIANA BURN ANNUALLY?

A. Historically, Duke Energy Indiana natural gas burn has averaged 37.1 million MBtu over the last five years and, based on the mean stochastic forecast as of December 1, 2023, is projected to average 73.1 million MBtu over the next four years, then increase to an average 80.7 million MBtu in 2028 as planned additions to natural gas generation come on-line.

Q. PLEASE DESCRIBE HOW THE COMPANY PURCHASES NATURAL GAS FOR ITS NATURAL GAS-FIRED GENERATING UNITS.

A. For gas-fired generators, Duke Energy Indiana purchases natural gas pursuant to supply agreements that allow for competitive daily and spot market gas supply purchases from third parties.

Duke Energy Indiana has contracts for the purchase of gas supply, pipeline transportation, balancing, and parking of natural gas needed for its generating stations. The Company utilizes the spot market to engage gas suppliers to procure natural gas consumed at Madison Generation Station, and Tenaska Marketing Ventures for natural

gas consumed at Wheatland, Cayuga CT, Noblesville, Vermillion, Henry County, and Edwardsport IGCC. A summary of the Company's transportation agreements are as follows: (1) on Panhandle Eastern Pipeline Company ("PEPL"), a firm transportation agreement, an interruptible transportation agreement, an enhanced interruptible transportation agreement and a parking service agreement. The firm natural gas transportation agreement on PEPL has a primary receipt point at the Texas Eastern / Lebanon point with delivery path to the pipeline interconnection with the Indiana Gas Company system (part of Vectren Energy Delivery of Indiana ("Vectren") a subsidiary of CenterPoint Energy) near Montezuma, Indiana and on a firm contract to the Cayuga CT and directly off the interconnection to Noblesville Station; (2) on Texas Eastern Pipeline Co. ("TETCO"), an interruptible transportation contract, a Lebanon lateral interruptible transportation agreement and operational balancing agreement with natural gas transportation and balancing for the Madison Station; (3) on Midwestern Pipeline a firm transportation agreement, a park and loan agreement, and an operational balancing agreement for gas delivery and parking services for the Wheatland Generation Station, Vermillion Station, and Edwardsport IGCC; (4) a gas transportation service agreement with Vectren Energy Delivery of Indiana – South for Edwardsport IGCC; and (5) a firm transportation agreement, an interruptible transportation agreement and a pooling transportation service on ANR Pipeline Company for the Henry County Station. The Company continues to use its existing firm transportation contracts to enhance supply reliability by reducing the risk of gas pipeline capacity curtailments during periods of tighter supply and demand conditions.

Q. WHAT IS THE COMPANY DOING TO IMPROVE GAS DELIVERABILITY?

A. Duke Energy Indiana continues to evaluate opportunities to acquire existing and project related expansion firm transportation ("FT") capacity to enhance supply deliverability and security to the Duke Energy Indiana generation portfolio. Most recently the Company has contracted for additional FT on Midwestern, Panhandle and ANR pipelines to enhance supply reliability to its gas generation and has moved to shift primary receipt points on the Panhandle and ANR FT contracts to the REX pipeline. REX operates at a high delivery pressure for greater reliability and provides access to producer supply from Appalachia for greater liquidity.

In addition, the Company has contracted for a new interconnection at Madison with REX pipeline which includes 50,000dth/day of FT. Madison is currently connected to TETCO pipeline. The increasing dependence upon natural gas generation has resulted in higher demands on pipelines, like TETCO. The TETCO pipeline is fully subscribed with no incremental firm transportation available and experiences reduced pressure and less operational flexibility during high demand periods. REX is a newer pipeline with a strong record of liquidity and reliable deliverability.

Q. PLEASE DESCRIBE HOW THE PRICE OF NATURAL GAS HAS CHANGED SINCE 2019.

A. Natural gas prices are dynamic, volatile and can change significantly based on market fundamental drivers. For the period of January 1, 2019 through December 31, 2023, the daily prompt month Henry Hub Futures price for natural gas ranged between a low of $1.48 per MMBtu on June 25, 2020 to a high of $9.68 per MMBtu on August 20, 2022.

The average daily settlement price during this time period was $3.51 per MMBtu. The futures price reflects the NYMEX Henry Hub pricing and is not indicative of the actual delivered gas price to Duke Energy Indiana's generation stations but is representative of the volatility in natural gas pricing during the period. The delivered gas cost to the stations is the daily settled Henry Hub price plus the cost to deliver gas to the plant specific location on the delivery pipeline.

Q. PLEASE DESCRIBE THE LATEST TRENDS IN NATURAL GAS MARKET CONDITIONS.

A. The nation's natural gas supply has grown significantly over the last several years as producers enhanced production techniques, improved efficiencies, and lowered production costs. Natural gas market prices reflect the dynamics between supply and demand factors. Since 2019 there has been significant volatility in natural gas market dynamics as natural gas prices have swung from historic lows in 2020 influenced by the impacts of COVID-19 economic shutdowns on demand to rapidly rising price in 2021 and 2022 as gas production's slow response to rising prices and the uncertainty of future coal deliveries placed continued stress on gas storage replenishment through much of 2021 and 2022, keeping upward pressure on gas prices well into the latter half of 2022. Over the course of 2023, mild weather, growing storage inventory balances and increasing production, have caused natural gas prices to sharply decline.

In addition, there continues to be growth in the need for natural gas pipeline infrastructure to serve increased market demand. However, pipeline infrastructure project permitting, and regulatory process approval efforts are taking longer and have increasing

execution risk due to increased reviews and interventions, which can delay and change planned pipeline construction and commissioning timing. Over the longer-term planning horizon, natural gas supply has the ability to respond to changing demand; but the pipeline infrastructure needed to move the growing supply to meet demand related to power generation, liquefied natural gas exports, and pipeline exports to Mexico is highly uncertain.

Q. HOW DO CHANGES IN NATURAL GAS PRICES IMPACT THE COMPANY'S COAL BURN?

A. The Company's coal burn is primarily dictated by the natural gas price impact on MISO dispatch. Shale gas production growth trends, natural gas transportation infrastructure projects, gas price volatility, and growth in renewable wind generation have impacted the economics for dispatch in the Midwest electric generation market. As the price of natural gas is a large determinant of the MISO power price, the commodity price relationship between coal and natural gas has significant impacts on the competitiveness of coal fired generation in the MISO market. Because of these changing fuel market dynamics, Duke Energy Indiana has experienced increased volatility in the operations of fossil fuel generation plants and associated coal inventory balances. Duke Energy Indiana continuously evaluates and adjusts their supply and transportation procurement strategies to manage swings in coal supply needs and on-site inventory that result from fuel price volatility.

Q. DO YOU HAVE AN OPINION AS TO WHETHER THE COMPANY PURCHASED NATURAL GAS AT THE LOWEST PRICES REASONABLY POSSIBLE?

A. Yes. It is my opinion that the Company purchased natural gas at the lowest cost reasonably possible.

C. Oil

Q. HOW MUCH OIL DOES DUKE ENERGY INDIANA BURN ANNUALLY?

A. Historically, Duke Energy Indiana fuel oil burn has averaged 3.7 million gallons over the last five years and is projected to average 3.5 million gallons over the next five years based on the mean stochastic forecast as of December 1, 2023.

Q. REFERRING NOW TO THE COMPANY'S PURCHASE OF OIL, WILL YOU DESCRIBE THOSE PURCHASES?

A. Oil for peaking and cycling units is purchased from one supplier at the current index prices as of the date of delivery under prearranged logistics. Our primary oil requirements are for #2 ultra-low sulfur fuel oil, which varies little in delivered quality.

Q. BASED UPON YOUR EXPERIENCE, DO YOU HAVE AN OPINION AS TO WHETHER THE COMPANY PURCHASED OIL AT THE LOWEST PRICES REASONABLY POSSIBLE?

A. Yes. It is my opinion that the Company purchased oil at the lowest cost reasonably possible.

III. DUKE ENERGY INDIANA FORWARD-LOOKING TEST PERIOD FUEL AND PURCHASE POWER EXPENSE

Q. DID THE FUELS AND SYSTEM OPTIMIZATION GROUP PROVIDE COMPANY WITNESS MR. RUTLEDGE WITH THE ELECTRIC FUEL AND PURCHASE POWER COST FORECAST USED IN ESTABLISHING THE FUEL AND PURCHASE POWER EXPENSE IN THE DUKE ENERGY INDIANA FORWARD-LOOKING TEST PERIOD?

A. Yes. Under my direction and supervision, the Fuels and System Optimization group provided Mr. Rutledge the electric fuel and purchased power cost forecast used in establishing the fuel and purchase power expense in the Forward-Looking Test Period. As Vice President of Fuels & Systems Optimization, I provide oversight of the teams responsible for the fuel related inputs to the production cost model used to simulate the generation output and the associated costs used to create the forecast.

Q. WHAT MAJOR FUEL AND PURCHASED POWER ASSUMPTIONS ARE IN THE FORWARD-LOOKING TEST PERIOD?

A. To forecast the output of the Company's generating units, the Company uses a stochastic production costing model calibrated to the Duke Energy Indiana system for forecasting. All of Duke Energy Indiana's generating units are represented in the model with their key characteristics, such as capacity, fuel type, heat rate, and emission rates. Other inputs include fuel costs for each unit, forced outage rates, the market value for emission allowances, the market price for power, and the Company's load forecast for native load customers. The model simulates the economic dispatch of the Company's

generating fleet and projects purchases on an hourly basis to meet the forecasted load for current and future periods for 100 individual scenarios. For the time periods forecasted, system load and commodity prices (gas, coal, oil and power) are all calculated in a correlated manner using historical correlations with each other and with weather to calculate the expected amount and type of fuel that would be used, the number of emission allowances consumed, and the amount of power generated and purchased to most economically serve our customers. In addition, the resulting forecasts also provide the Company with the range of fuel burns and the probability associated with each range.

The Company's fuel forecasting methodology for natural gas pricing incorporates third-party market natural gas prices and volatility at the time of forecast into the fuel forecast. The market volatilities used are obtained and derived from observed third-party option pricing from the Intercontinental Exchange. Third-party basis adders are included to deliver the gas to the generating stations along with any transportation and loss charges. The coal fuel costs are derived based on each station's weighted average cost of coal which are calculated by incorporating existing inventory costs, projected contractual costs including transportation, and third-party market coal prices.

Q. ARE DUKE ENERGY INDIANA'S RETAIL JURISDICTIONAL FUEL COSTS ASSUMPTIONS FOR 2025 REASONABLE?

A. Yes. Duke Energy Indiana makes every reasonable effort to provide electricity to its retail customers at the lowest fuel cost reasonably possible. As the Company explains in its quarterly fuel adjustment clause proceedings, Duke Energy Indiana purchases coal pursuant to long-term contracts entered into after competitive bidding and on the spot

markets. For gas-fired generators, Duke Energy Indiana purchases natural gas pursuant to supply agreements that allow for competitive daily and spot market gas supply purchases from third parties.

IV. TRACKING COAL INVENTORY

Q. ARE YOU PROPOSING ANY NEW MECHANISMS RELATED TO HOW THE COMPANY MANAGES ITS COAL INVENTORY CARRYING COSTS?

A. Yes. The Company is proposing to build into its base rates a representative balance of coal inventory (approximately 2,333,474 tons or 45 days full load burn at a rate of 51,490 tons per day) and then track the actual inventory balance, both up and down, in the Company's quarterly FAC filings as discussed in the testimony of Company witness Ms. Graft. The forecasted coal inventory balance activity is an input into the overall fuel forecast used in the Forward-Looking Test Period as discussed above.

Q. WHY IS THE COMPANY PROPOSING TO TRACK ITS COAL INVENTORY BALANCE?

A. While Duke Energy Indiana is proposing a representative balance of coal inventory, the Company actively manages system inventories within established reliability and operational safety tolerances, which are typically a minimum of **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>** days and maximum of **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>** days full load burn inventory. These inventory balances are reasonable boundaries established to manage coal resupply risk and ensures that the Company has adequate on-site coal inventories during periods of

supply disruption, such as those seen in 2021 and 2022, to maintain reliable and economic generation for its customers.

Since the last rate case proceeding, Duke Energy Indiana's coal inventory has ranged from a low of 885,433 tons (17 days of coal supply at a full load burn rate of 51,490 tons per day) in August of 2021 to a high of 3,255,514 tons (63 days of coal supply at a full load burn rate of 51,490 tons per day) in December of 2023. As discussed earlier in my testimony, these changes in inventory were not the result of any change in the Company's coal procurement practices but were a direct outcome of the volatile energy commodity market pricing environment impacting unit dispatch and inelasticity of the coal supply chain which can cause coal inventories to fluctuate significantly over short periods of time. Tracking the actual inventory balance, both up and down, in the quarterly FAC filings provides a more proactive mechanism for reflecting the changes in inventory balances in customer rates more quickly as inventory dynamics change.

Q. WHY WOULD THIS PROPOSED CHANGE SUPPORT THE WAY THE COMPANY MANAGES COAL INVENTORY, AS OPPOSED TO THE CURRENT APPROACH?

A. Duke Energy Indiana sees the proposed tracking of its coal inventory balance working in conjunction with the supply offer adjustment to maintain reliable and cost-effective generation for its customers out into the future. The supply offer adjustment supports the Company maintaining on-site coal inventories between the minimum and maximum target levels ensuring adequate inventories during periods of peak demand while tracking

its coal inventory balance will provide a mechanism for reflecting changes in inventory balances in customer rates more quickly as inventory dynamics change.

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY AT THIS TIME?

A. Yes.

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: _____ Date: April 4, 2024

John A. Verderame