TESTIMONY OF BRETT PHIPPS
MANAGING DIRECTOR, FUEL PROCUREMENT
DUKE ENERGY PROGRESS, LLC
ON BEHALF OF DUKE ENERGY INDIANA, LLC
CAUSE NO. 38707-FAC127 BEFORE THE
INDIANA UTILITY REGULATORY COMMISSION

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brett Phipps, and my business address is 526 South Church Street, Charlotte, NC 28202.

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

A. I am employed as Managing Director, Fuel Procurement, Duke Energy Progress, LLC, a utility affiliate of Duke Energy Indiana, LLC ("Duke Energy Indiana" or "Company"). In that capacity, I also provide services for Duke Energy's other affiliate utility companies, including Duke Energy Indiana, LLC.

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

A. I am a 1992 graduate of Marshall University with a Bachelor of Science in Chemistry. I have worked in the energy industry for approximately 29 years. My career began in the mining industry in 1993 where I held various roles associated with surface mining operations. I was employed with Progress Energy since 1999 where I held roles in terminal operations and sales and marketing for the unregulated business. I transitioned to the regulated business in 2005 where I

worked in various fuels procurement functions and leadership roles. I joined Duke Energy in July 2012 and am currently Managing Director, Fuel Procurement. I am a member of: American Coal Council, The Coal Institute, the Lexington Coal Exchange and Southern Gas Association.

Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS MANAGING DIRECTOR, FUEL PROCUREMENT.

A. As Managing Director, Fuel Procurement, I participate in all aspects of the overall strategic direction and commercial management of the purchase, delivery and storage of fossil fuels that the Duke Energy regulated utilities use for the generation of electricity. As part of this activity, I monitor and provide guidance in the various areas of fuel markets, including feedback regarding supply and demand, price, quality, availability, economics and deliverability. These fuel reviews cover both existing and potential future supply sources. I also supervise the Company's fuel procurement activity and associated transportation including the negotiation and administration of long-term and short-term-purchase contracts. In addition to fuels, I also supervise procurement of reagents (products used by environmental control systems), fuel oil and natural gas, optimization of emission allowances, and the overall fuel inventories for the regulated fossil generation fleet.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will discuss the process that Duke Energy Indiana determine its fuel procurement needs. I will discuss the status of the Company's fuel procurement for coal, natural gas and fuel oil. I will also present Duke Energy Indiana's coal procurement plan for 2021 and 2022 as required by the Final Order in FAC 125.

II. FORECASTING FUEL NEEDS

Q. PLEASE DESCRIBE THE MODELING OUTPUTS THE COMPANY USES TO ASSIST IN EVALUATING ITS PROCUREMENT NEEDS.

A. In the past, the Company used the modeling outputs from its forecast model, GenTrader, in evaluating its coal procurement needs. During this FAC period, Duke Energy Indiana continued its transition to incorporating the outputs of its new Fleet Analytics Stochastic Tool "FAST" model into its fuel evaluation process for 2021 and beyond.

Q. PLEASE EXPLAIN THE MODEL CHANGES UTILIZING STOCHASTIC CAPABILITIES.

A. The stochastic model uses historic weather information to simulate numerous scenarios of future weather and commodity prices. For each of these scenarios, 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. The resulting forecasts of this stochastic model gives the Company not only expected fuel burns, but also the range of fuel burns and the probability associated with each range.

Q. WHAT WAS DUKE ENERGY INDIANA'S FUEL BURN FOR THE FAC PERIOD?

A. Duke Energy Indiana's coal burn was 2.6 million tons, compared to a coal burn of 2.4 million tons in the prior FAC period, representing an increase of 11%. The Company's natural gas burn for the FAC period was 4,858,164 MMBtu, compared to a gas burn of 12,344,794 MMBtu in the prior FAC period, representing a decrease of approximately 61%. The change in coal and gas burns in the FAC period were driven primarily by increasing natural gas prices.

III. COAL

Q. PLEASE EXPLAIN THE PROCESS THE COMPANY UNDERTAKES TO MANAGE ITS COAL NEEDS.

A. The Company utilizes a comprehensive coal procurement strategy that has proven successful over the years in limiting average annual fuel price changes while actively managing the dynamic demands of its fossil fuel generation fleet in a reliable and cost-effective manner. Aspects of this procurement strategy include determining an appropriate amount of long-term purchases as well as any short-term purchases needed to fill any potential open position, evaluating contract expirations and limiting exposure to market price changes, diversifying sourcing, and incorporating additional flexibility into the supply contracts. In addition, Duke Energy's Regulated Fuel Department personnel visit each of the Company's contracted producers and mining operations regularly, and any potential new

producers, to gather information that assists in our analysis of coal needs. This information, coupled with constant monitoring of published pricing information (*e.g.* industry newsletters, trade publications, regulatory filings, etc.), as well as a close review of market pricing indices published by brokers and traders, provides a thorough understanding of the various coal markets.

Q. HOW DOES THE COMPANY DETERMINE WHETHER TO PURCHASE COAL UNDER A LONG-TERM VS. A SHORT-TERM CONTRACT?

A. In order for Duke Energy to provide a reliable source of electricity, an adequate inventory must be maintained to protect against changes in coal burn volatility. The fuel procurement team continuously monitors actual and projected inventory levels, projected coal burns, the amount of coal under contract and the quality characteristics needed for a particular generating station to determine its purchasing needs and to determine appropriate level of supply, including the need to respond to immediate supply needs through short term purchases.

Q. ONCE THE COMPANY DECIDES THAT IT NEEDS TO PURCHASE COAL UNDER A LONG-TERM CONTRACT, PLEASE DESCRIBE THE PROCESS.

A. Coal supply requirements are competitively bid and proposals are secured from producers and evaluated thoroughly, taking into account coal quality, quantity, volume flexibility, transportation alternatives and price, among other factors. The producer (or producers) whose coal offers the best value, particularly with regard

to overall utilization costs and volume flexibility, is selected for further negotiations to produce a long-term contract or contracts. It is important to note that many of our long-term contracts contain provisions for periodic price reopener negotiations, some type of price escalations and de-escalations, or a mechanism to adjust prices based upon a published market price index. In addition, all of our coal transportation contracts in Indiana contain fuel price surcharge provisions that are based upon published fuel price indices.

Q. ONCE THE COMPANY DECIDES THAT IT NEEDS TO PURCHASE COAL UNDER A SHORT-TERM CONTRACT, PLEASE DESCRIBE THE PROCESS.

A. The primary difference in the process is that for spot purchases, those contracts with a duration of 12 months or less, telephone solicitations are utilized to allow for prompt execution and delivery in order to support immediate supply needs resulting from changes in burn, inventory levels, or supply and transportation challenges.

Q. WHAT WAS THE COST OF COAL PURCHASED PURSUANT TO ALL CONTRACTS FOR THE TWELVE-MONTH PERIOD ENDING NOVEMBER 30, 2020?

A. For the twelve-month period ending November 30, 2020, the Company purchased a total of approximately 8.9 million tons of coal (pursuant to both long and short-term contract commitments) at an approximate average cost of $2.09/MMBtu.

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 various methods and strategies to ensure reasonable costs, including the use of staggered terms on long-term contracts, maintaining a diversified mix of suppliers, and using indices, at times, in the determination of adjustment of prices. Duke Energy Indiana diversifies its sourcing of suppliers and works with suppliers to incorporate additional flexibility into the supply contracts. In addition, my group conducts constant monitoring of published pricing information (*e.g.* industry newsletters, trade publications, regulatory filings, etc.), and closely reviews market pricing indices published by brokers and traders.

Q. PLEASE DESCRIBE THE LATEST PRICE TRENDS IN COAL .

A. Published prices for U.S. coal markets have increased slightly since the last fuel proceeding in response due to the increased demand for coal generation from recent weather and increased natural gas prices. The following are 2021 market price indications for the different coal producing regions as of mid-January 2020. High-sulfur Illinois basin coal prices are in the high $20's to low $30's per ton; Central Appalachia coal prices are in the high $40's to low $50's per ton; Northern Appalachia coal prices are in the high $30's per ton to the low $40's; and Powder River Basin coal prices are approximately $11 per ton.

Q. PLEASE DESCRIBE THE LATEST COAL MARKET TRENDS.

A. Coal markets continue to be distressed and there has been market volatility due to a number of factors, including: (a) deteriorated financial health of coal suppliers due to a decrease in demand for coal stemming from accelerated coal retirements and overall declines in coal generation demand resulting from COVID-19; (b) renewed uncertainty from the new administration regarding proposed and imposed U.S. Environmental Protection Agency ("EPA") regulations for power plants; (c) abundant natural gas supply and storage resulting in lower natural gas prices combined with installation of new combined cycle ("CC") generation by utilities, especially in the Southeast, which also has lower overall coal demand; (d) changing demand in global markets for both steam and metallurgical coal; (e) increasingly stringent safety regulations for mining operations, which result in higher costs and lower productivity; (f) volatile power prices; (g) mergers and acquisitions in the different coal basins; (h) mining production changes in an attempt to bring supply of coal into balance with current demand.

Q. HAVE ANY OF THE COMPANY'S SUPPLIERS EXPERIENCED SIGNIFICANT FINANCIAL OR OPERATIONAL CONSTRAINTS?

A. Yes. White Stallion Energy, which includes Solar Sources, filed for Chapter 11 bankruptcy on December 3, 2020. The Company is actively monitoring the bankruptcy proceedings.

Due to financial pressures, S&P and Moody's downgraded Peabody Energy ("Peabody) in the 3rd quarter of 2020.

On Christmas Eve 2020, Peabody announced they had reached an agreement with many of its creditors providing a solution to extend its existing debt maturity to December 2024 while converting its existing credit facility into additional financing that will also be due in December 2024. This agreement allows Peabody to avoid a bankruptcy declaration in the new year.

Despite the distress on the coal industry, the Company has not experienced significant non-performance by suppliers on any of its coal contracts during the FAC 127 time period. With that being said, the Company remains concerned with the viability of future supply due to the financial constraints facing its suppliers.

Q. PLEASE DESCRIBE THE COMPANY'S DELIVERED COST OF COAL DURING THE FAC PERIOD.

A. The Company's average delivered cost of coal per ton for the test period was $47.98 per ton, compared to $46.86 per ton in the prior FAC period, representing an increase of approximately 2%.

Q. DID THE COMPANY ISSUE ANY REQUESTS FOR PROPOSALS ("RFPs") DURING THIS FAC PERIOD?

A. No, the Company did not issue a Request for Proposal during the FAC 127 time period.

Q. DID THE COMPANY EXECUTE ANY CONTRACTS DURING THIS FAC PERIOD?

A. No, the Company did not execute any new contracts during this FAC period. As discussed in FAC 126 the Company is continuing to evaluate the proposals received from the RFP issued during FAC 126 for future periods.

Q. IS DUKE ENERGY INDIANA CONSIDERING PURCHASING COAL FROM THIS RFP TO MEET ITS LONG TERM COAL SUPPLY NEEDS?

A. Yes, Duke Energy Indiana is considering purchasing coal to reliably meet its long-term coal supply needs.

Q. DID THE COMPANY EXECUTE ANY AMENDMENTS TO DEFER TONS DURING THIS FAC PERIOD?

A. Yes. On November 13, 2020, the Company executed an Amendment with Peabody Coalsales, LLC deferring tons from 2020 into 2021. Deferring tons is a normal course of business.

Q. HAS DUKE ENERGY INDIANA REOPENED THE PRICE IN ANY COAL OR TRANSPORTATION CONTRACTS?

A. No. The Company did not execute market price reopeners during this FAC period of September through November 2020. The Company was actively negotiating rail transportation contracts set to expire by year-end.

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

A. I do. In my opinion, the Company purchased coal at prices as low as reasonably possible at the time the purchases were made.

IV. COAL INVENTORY POSITION

Q. PURSUANT TO THE COMMISSION'S ORDER IN FAC 95, PLEASE EXPLAIN THE COMPANY'S COAL INVENTORY POSITION.

A. As noted in my FAC 126 testimony, filed on October 30, 2020, Duke Energy Indiana's coal inventories as of August 31, 2020, were approximately 3,170,521 tons (or 58 days of coal supply at a full load burn rate per day) across the system. As of November 30, 2020, coal inventories decreased to approximately 2,663,690 tons (or 49 days of coal supply). This decrease in coal inventories can be attributed to an increased demand during the fall months. Duke Energy Indiana projects coal inventories will decrease over the next quarter.

Q. DID THE COMPANY HAVE COAL STORED AT ANY INTERIM STORAGE SITES? IF SO, WHAT WAS THE AMOUNT IN STORAGE AND ARE THERE ANY PLANS TO INCREASE OR DECREASE THE AMOUNTS IN STORAGE?

A. At the end of the review period, the Company did have two interim storage locations with a combined total of 1,405,557 tons. The Company expects the amounts in off-site storage to either stay flat or decrease in the next FAC period.

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

A. The Company continues to evaluate a host of options in order to effectively manage inventory levels. As mentioned previously, the Company actively manages its portfolio which includes maintaining a reasonable open position that allows the Company to be more responsive to current actual burns and projected future burns that have become more volatile. However, in cases where actual burns unexpectedly drop below projections and the Company's inventory levels are above target, as inventory levels dictate, the Company explores options to store or defer contract coal or resell surplus coal into the market. Due to continued weak coal market conditions, resale opportunities will continue to be extremely difficult in the near term. The Company will continue to closely monitor its anticipated coal requirements and inventories and take every action available to cost effectively control coal inventories in the least cost-impact manner for customers. Given the continued decline in coal burns due to falling power prices during the FAC period, the Company began a coal decrement in March, as discussed in the testimony of Mr. Daniel.

V. COAL PROCUREMENT PLAN

Q. PURSUANT TO THE FINAL ORDER IN FAC 125, ARE YOU PRESENTING THE COMPANY'S COAL PROCUREMENT PLAN FOR 2021 AND 2022?

A. Yes. Please see Petitioner's Confidential Exhibit 4-A.

Q. PLEASE PROVIDE A HIGH LEVEL OVERVIEW OF THE 2021 COAL PROCUREMENT PLAN.

A. Given the Company's 2021 forecasted system mean coal burn of 7.6 million tons, as of December 15, 2020, and the Company's current contracted position and beginning 2021 inventory levels, Duke Energy Indiana does not anticipate purchasing additional coal supply at this time. However, factors such as faster than anticipated inventory declines due to strong burns and the potential for delayed deliveries of coal from: 1) the off-site inventory stockpiles due to White Stallion's on-going bankruptcy proceedings and 2) from Peabody's Bear Run mine due to equipment issues, may lead the Company to need to purchase tons in 2021 to ensure reliable supplies.

Q. PLEASE PROVIDE A HIGH-LEVEL OVERVIEW OF THE 2022 COAL PROCUREMENT PLAN.

A. Given the Company's forecasted system mean coal burn for 2022 of 11.2 million tons, as of December 15, 2020, and the Company's current contracted position of <BEGIN CONFIDENTIAL> [redacted] <END CONFIDENTIAL> in 2022

and beyond, Duke Energy Indiana will need to purchase coal in forward years taking into account the parameters outlined earlier on pg. 5, lines 18-21, and page 6, lines 1-2.

VI. NATURAL GAS

Q. PLEASE DESCRIBE THE LATEST PRICE TRENDS IN NATURAL GAS.

A. Spot natural gas prices are dynamic, volatile and can change significantly day to day based on market fundamental drivers. During September through November 2020, natural gas prices were above those experienced in the FAC126 review period. For the period of September 1, 2020 through November 30, 2020, the price the Company paid for delivered natural gas at its gas burning stations was between a low of $1.15 per MMBtu for gas delivered on October 10, 2020 to a high of $3.60 per MMBtu for gas delivered on November 1, 2020. In comparison, during the previous 3-month period of June 1, 2020 to August 31, 2020 , the price the Company paid for delivered natural gas at its gas burning generation stations was between a low of $1.44 per MMBtu for gas delivered on June 17, 2020, to a high of $3.20 per MMBtu on August 21, 2020.

The nation's natural gas supply has grown significantly over the last several years and producers continue to enhance production techniques, enhance efficiencies, and lower production costs. Natural gas prices are reflective of the dynamics between supply and demand factors, and in the short term, such dynamics are influenced primarily by seasonal weather demand and overall storage inventory

balances. In addition, there continues to be growth in the natural gas pipeline infrastructure needed to serve increased market demand. However, pipeline infrastructure permitting and regulatory process approval efforts are taking longer 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 is projected to continue to increase along with the needed pipeline infrastructure to move the growing supply to meet demand related to power generation, liquefied natural gas exports and pipeline exports to Mexico.

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

A. 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 primarily utilizes Sequent Energy Management, L.P. to schedule and 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) 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) 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. HAS THE COMPANY RENEWED OR AMENDED ANY CONTRACTS FOR NATURAL GAS SUPPLY AND TRANSPORTATION CAPACITY?

A. No renewals or amendments were executed to the Company's natural gas supply or Firm or non-firm Transportation contracts during the period September through November 2020.

Q. PLEASE DESCRIBE THE COMPANY'S DELIVERED COST OF NATURAL GAS DURING THE FAC PERIOD.

A. The Company's average price of gas purchased for the FAC period was $2.32 per Million British Thermal Units ("MMBtu"), compared to $1.96 per MMBtu in the prior FAC period, representing an increase of approximately 18%.

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 at the lowest cost reasonably possible.

VII. FUEL OIL

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 lowest delivered price available 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.

VIII. CONCLUSION

Q. ARE YOU AWARE OF ANY SIGNIFICANT OUT OF PERIOD ADJUSTMENTS TO FUEL INVENTORY OR FUEL EXPENSE BEING MADE IN THIS PROCEEDING?

A. No, there were not any out of period adjustments during the FAC 127 period.

Q. WAS PETITIONER'S CONFIDENTIAL EXHIBIT 4-A PREPARED BY YOU OR AT YOUR DIRECTION?

A. Yes.

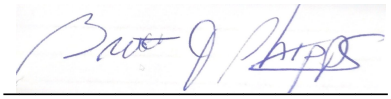
Q. DOES THIS CONCLUDE YOUR PREPARED TESTIMONY?

A. Yes, it does.

PETITIONER'S EXHBIT 4-A IS CONFIDENTIAL

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:  Dated: 1/29/2021

Brett Phipps