Cause No. 46193

On Behalf of Petitioner,
DUKE ENERGY INDIANA, LLC

VERIFIED DIRECT TESTIMONY OF JAMES J. McCLAY, III

Petitioner's Exhibit 4

February 13, 2025

TESTIMONY OF JAMES J. McCLAY, III
MANAGING DIRECTOR OF NATURAL GAS TRADING
DUKE ENERGY CORPORATION
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 James J. McClay, III, and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202.

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

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

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a Bachelor's Degree in Business Administration, majoring in Finance from St. Bonaventure University. After 14 years as a fixed income bond trader specializing in government securities, I joined Progress Energy in 1998 as an Energy Trader, was promoted to Manager of Power Trading and held that position through early 2003. I then became the Director of Power Trading and Portfolio Management for Progress Energy Ventures through February 2007. From March 2007 through late 2008, I was the Director of Power Trading for Arclight Energy Marketing. From March 2009 through the present, I have been employed in various managerial roles at Progress Energy and Duke Energy overseeing Natural

Gas Trading and Origination, Pipeline Transportation, Power Trading, Oil procurement, and various jurisdictions' hedging programs.

Q. WHAT ARE YOUR DUTIES AND RESPONSIBILITIES AS MANAGING DIRECTOR OF NATURAL GAS TRADING, AS THEY RELATE TO DUKE ENERGY INDIANA, LLC ("DUKE ENERGY INDIANA" OR "COMPANY")?

A. As Managing Director of Natural Gas Trading, I manage the organization responsible for the natural gas trading, optimization and scheduling functions, gas supply and pipeline transportation origination, oil procurement and emissions management for the regulated gas-fired generation assets in the Carolinas (Duke Energy Carolinas and Duke Energy Progress), Duke Energy Florida, Duke Energy Indiana and Duke Energy Kentucky (collectively, the "Utilities"), as well as the organization responsible for power trading for Duke Energy Indiana and Duke Energy Kentucky. Additionally, I oversee the execution of the Utilities' financial hedging programs, fuel oil procurement, and emissions compliance trading.

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

A. The purpose of my testimony is to provide the Commission an overview of Duke Energy Indiana's executable plan to fuel the estimated 1,476 (winter rating) - megawatt ("MW") combined cycle ("CC") project (the "Cayuga CC Project"), which the Company proposes to construct at the site of its existing Cayuga coal-fired generating plant ("Cayuga"), in Vermillion County, Indiana. My testimony

initially provides the Commission an update on the changing landscape for additional new interstate natural gas pipeline infrastructure into Indiana and the Company's involvement in these projects to support the fuel security of both existing and proposed new natural gas generation. My testimony then addresses Duke Energy Indiana's executable plan to ensure the sufficiency of natural gas firm transportation ("FT") to the Cayuga CC Project and how this plan considers the five pillars as part of the decisions around electric generation resource mix and energy infrastructure as directed by Indiana Code § 8-1-2-0.6.

II. INDIANA FUEL SECURITY AND GAS SUPPLY STRATEGY

Q. PLEASE DESCRIBE DUKE ENERGY INDIANA'S CURRENT INTERSTATE FT CAPACITY AND NEED FOR ADDITIONAL FT TO SUPPORT THE FUEL SECURITY OF ITS EXISTING NATURAL GAS GENERATION FLEET AND THE PROPOSED CAYUGA CC PROJECT.

A. Duke Energy Indiana's existing natural gas fleet has a peak capacity requirement of approximately 776,000 Million British Thermal Units ("MMBtu") per day. Given the uncertain and variable nature of the forecasted natural gas usage at the Company's combustion turbine ("CT") facilities, the Company has maintained a FT strategy that balances operational flexibility and customer costs while ensuring adequate gas deliverability during periods of high demand. Currently, the Company has 197,800 MMBtu per day of contracted term FT: Midwest Gas Transmission (MGT) 80,800 MMBtu/day supporting Edwardsport IGCC, Wheatland and Vermillion CTs; Panhandle Eastern Pipeline (PEPL) 45,000

MMBtu/day supporting Noblesville CC and Cayuga CT4; ANR Pipeline (ANR) 22,000 MMBtu/day supporting Henry County CT; and Rockies Express Pipeline (REX) 50,000 MMBtu/day supporting future Madison CT fuel security. In addition, the Company has contracted with REX for 5,000 MMBtu/day winter '24/25 seasonal capacity supporting Noblesville CC. The above FT capacity is not able to serve the Cayuga CC Project and thus the addition of the Cayuga CC Project to Duke Energy Indiana's fleet will add to the Company's need for additional interstate FT.

As discussed in Appendix F of Duke Energy Indiana's 2024 Integrated Resource Plan (IRP),[1] dispatchable natural gas-fired resources are expected to play an important role in the Company's diverse future portfolio as the Company's existing natural gas units will continue to provide grid support where renewables and storage cannot, while new advanced class CC units will provide cost-effective energy and capacity to reliably replace aging coal-fired units and meet growing customer demand. The interstate FT capacity provided by the REX Pipeline capacity additions discussed below is essential to enable new additions to the Duke Energy Indiana generation fleet - such as the Cayuga CC Project - while providing for increased fuel security to the existing natural gas generation during periods of peak demand.

Q. PLEASE DESCRIBE THE PLANNED OR COMPLETED INTERSTATE PIPELINE CAPACITY ADDITIONS THAT WILL PROVIDE NEEDED

[1] *See* the Direct Testimony of Mr. Gagnon, Attachment 6-A (NG).

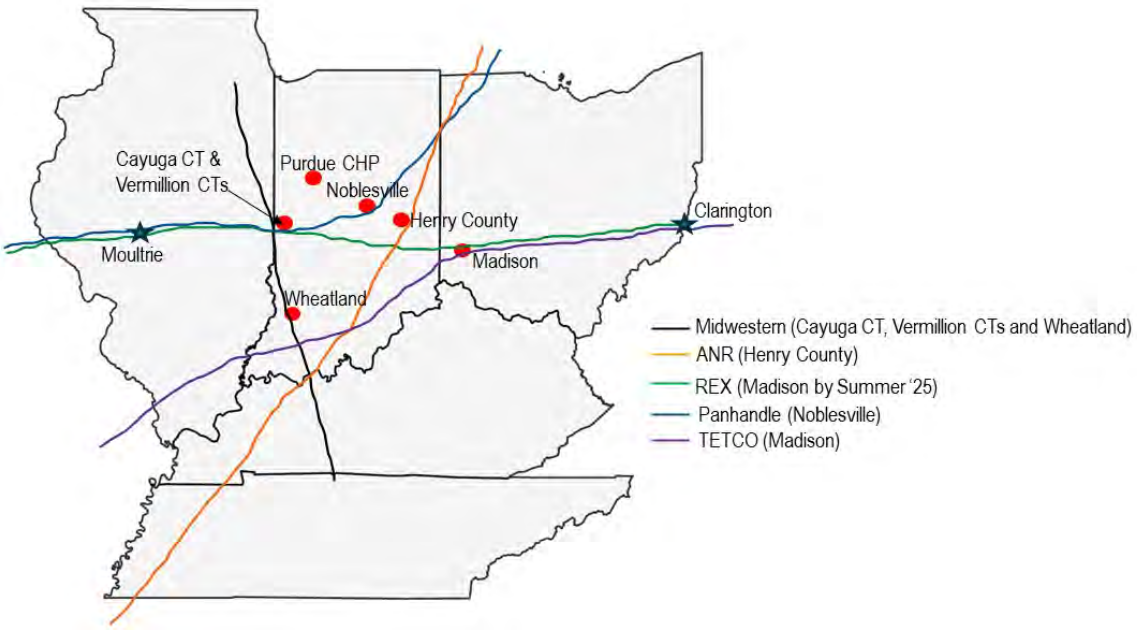
FUEL SECURITY FOR THE CAYUGA CC PROJECT, AS WELL AS THE COMPANY'S EXISTING NATURAL GAS GENERATION FLEET.

A. There are two interstate pipeline capacity additions completed by REX that will provide additional gas supply and interstate FT to the Cayuga CC Project, as well as the existing natural gas fleet: the East to West Expansion and the West to East Path. REX is a 1,679-mile interstate natural gas pipeline originally built to gather production in the Rockies with ultimate delivery to East coast markets, completed in 2009. Since then, it has been made fully bidirectional and now also flows gas from production in Appalachian shale basins West to downstream major interstate pipelines. It is a relatively newer pipeline than existing pipelines in the Midwest and operates at much higher pressures, with a Maximum Allowable Operating Pressure ("MAOP") of 1,480 pounds per square inch gauge ("PSIG"). By comparison, pipelines constructed in the 1950s operate at pressures closer to 600-800 PSIG. Higher pressure better aligns with development of the Cayuga CC Project and provides for higher line pack for better management of demand volatility.

As shown in the below figure, REX is strategic to Duke Energy Indiana's gas generation fleet as it can deliver gas from historically lower priced production to the interconnects of all the pipelines that serve the fleet. Having FT with bidirectional paths provides for additional reliability in the event of disruptions on the pipeline and a diverse supply of gas. Secondary connection points include the

interconnects with MGT, ANR, PEPL, and the Madison station providing support to the existing gas generation fleet (see Figure 1).

Figure 1



REX East to West Pipeline Path Expansion

The East to West path was created in part by a Federal Energy Regulatory Commission ("FERC") Prior Notice project where minor modifications to an existing compressor unit combined with existing capacity from REX. The Prior Notice project went into service on November 21, 2024. The East to West path includes the primary receipt and delivery points of Clarington Hub and a new interconnection with CenterPoint's Indiana Gas Company in Vermillion County, Indiana with ultimate delivery to the Cayuga CC Project. Clarington Hub is a high-volume production supply point with interconnects of several major interstate pipeline systems that deliver Appalachian shale gas supplies to REX.

REX West to East Pipeline Path

The West to East path includes primary receipt and delivery points of the Natural Gas Pipeline Company of America LLC ("NGPL") interconnect in Moultrie, Illinois and the new interconnect in Vermillion County, Indiana. NGPL is a pipeline which transports natural gas from the Texas Permian Basin and Gulf of Mexico into the Chicago area. It is a major point on the REX pipeline system and part of the Zone 3 pooling point.

Q. HAS THE COMPANY CONTRACTED FOR FT IN THE PROPOSED PIPELINE PROJECTS THAT WILL INCREASE GAS DELIVERABILITY TO THE CAYUGA CC PROJECT, AS WELL AS THE COMPANY'S EXISTING NATURAL GAS GENERATION FLEET?

A. Yes. As I have discussed in my testimony in the Company's FAC proceedings, Duke Energy Indiana participated in REX's open season for FT capacity. Specifically, Duke Energy Indiana has contracted for FT capacity with REX for 110,000 MMBtu/day of the East to West path and 130,000 MMBtu/day of West to East path for a total of 240,000 MMBtu/day. The FT will provide firm gas supply to the Cayuga CC Project, and the pipeline has interconnections with the Company's existing natural gas fleet enhancing deliverability to the entire Duke Energy Indiana system. This firm deliverability provides the Company's generation fleet with upstream access to diverse supply basins including the historically low-priced Appalachian region for enhanced reliability and fuel security. Cost recovery of the contracted interstate FT and associated gas supply

to the Cayuga CC Project is expected to be recovered through Duke Energy Indiana's future quarterly FAC proceedings.

Q. PLEASE DESCRIBE HOW THE CONTRACTED INTERSTATE NATURAL GAS FT CAPACITY SUPPORTS THE CAYUGA CC PROJECT.

A. The contracted interstate natural gas FT capacity noted above is for a total amount of 240,000 MMBtu/day that matches the total fuel requirements of the Cayuga CC Project at full load including base generation and duct burning capacity.

Q. WILL THE CAYUGA CC PROJECT HAVE FUEL OIL BACK-UP CAPABILITIES? PLEASE EXPLAIN.

A. No. As a newer fully bidirectional pipeline, the REX pipeline operates at high gas pressures and has demonstrated operational resilience during extreme demand periods. During extreme cold weather events, such as Winter Storm Uri and Elliott respectively, REX has demonstrated superior performance in gas delivery, reliably maintaining full capacity when other systems faltered. Given the robust natural gas availability at the Cayuga CC Project, and the 240,000 MMBtu/day of contracted REX FT that accesses supply basins and multiple interstate pipelines, the Company did not believe the added cost incurred to develop and maintain fuel oil back-up capabilities at the Cayuga CC Project was ultimately in customers' best economic interests.

Q. PLEASE DESCRIBE HOW DUKE ENERGY INDIANA'S PLANS FOR ADDITIONAL FT TO SUPPORT THE FUEL SECURITY OF ITS

EXISTING NATURAL GAS GENERATION FLEET AND THE CAYUGA CC PROJECT CONSIDERS THE FIVE PILLARS IDENTIFIED IN INDIANA CODE § 8-1-2-0.6.

A. As discussed in Mr. Stan Pinegar's testimony, the Five Pillars under Indiana law are: *Reliability, Resiliency, Stability, Environmental Sustainability,* and *Affordability.*

Q. PLEASE DESCRIBE HOW DUKE ENERGY INDIANA'S PLANS SUPPORT RELIABILITY.

A. As discussed earlier in my testimony, the purpose of contracting for FT off the REX pipeline is to provide enhanced fuel security and supply reliability to both the Cayuga CC Project and to the entire Duke Energy Indiana system. The Company's fuel security and supply reliability is supported by the overall operational configuration and robust liquidity provided by the REX pipeline as well as the directly contracted 240,000 MMBtu/day of bidirectional REX FT that accesses supply basins and multiple interstate pipelines.

Q. PLEASE DESCRIBE HOW DUKE ENERGY INDIANA'S PLANS SUPPORT RESILIENCY.

A. Duke Energy Indiana has contracted for FT that will provide firm deliverability to the Cayuga CC Project and can be used to deliver firm supply to all connecting pipelines serving the Duke Energy Indiana natural gas generation fleet. Contracting for FT from the REX pipeline increases the ability of the Company's

system to (a) adapt to changing conditions; and (b) withstand and rapidly recover from system disruptions.

Q. PLEASE DESCRIBE HOW DUKE ENERGY INDIANA'S PLANS SUPPORT STABILITY.

A. A key component to maintaining generation stability of a natural gas unit is the operating pressure of the delivering pipeline. As a newer pipeline, the REX pipeline operates at a high pressure (between 900PSI to 1400PSI) to support supply deliveries originating in Pennsylvania transporting the supply to as far as Wyoming. The required pressure of the Cayuga CC Project is below that of the REX Pipeline. Meaning that REX pipeline operations should be able to maintain delivery pressures necessary to support stable station operations during periods of system constraints such as extreme winter weather conditions.

Q. PLEASE DESCRIBE HOW DUKE ENERGY INDIANA'S PLANS SUPPORT AFFORDABILITY.

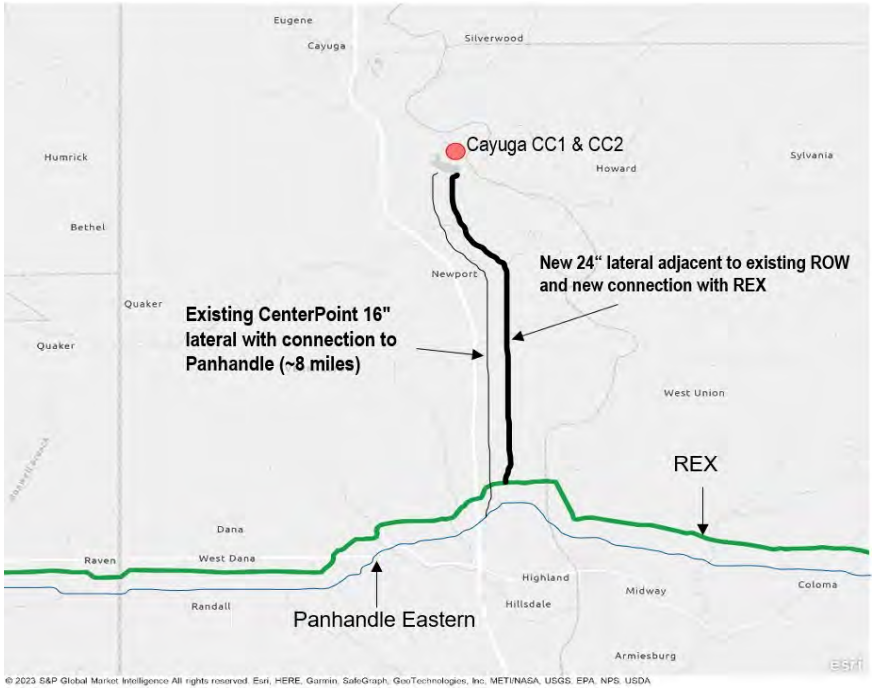
A. Duke Energy Indiana was able to secure long term firm transportation on the REX pipeline avoiding potential costly construction and project permitting risks. Contracting for REX capacity that uses existing pipeline infrastructure and accesses diverse supply locations increases opportunities for competitively priced supply for Duke Energy Indiana owned generation. These capacity attributes protect customers from volatility in the MISO energy market.

III. PLANS FOR INTRASTATE GAS DELIVERY TO THE CAYUGA CC PROJECT

Q. HOW DOES DUKE ENERGY INDIANA PLAN TO REDELIVER NATURAL GAS WITHIN INDIANA FROM REX TO THE CAYUGA CC PROJECT?

A. Duke Energy Indiana is contracting with Indiana Gas Company, Inc. d/b/a CenterPoint Energy Indiana North (CEI North) to construct a new 8.4 mile, 24" lateral pipeline in an adjacent right-of-way to an existing 16" lateral (see Figure 2). Pursuant to this contract, CEI North is responsible for obtaining the necessary regulatory approvals from the Indiana Utility Regulatory Commission and all associated permitting. The in-service date of the new lateral is targeted for Q4 2027.

Figure 2



Q. HAS DUKE ENERGY INDIANA CONTRACTUALLY ACQUIRED INTRASTATE FT TO SUPPORT THE NEEDS OF THE CAYUGA CC PROJECT?

A. Yes. The Company has negotiated and is in the process of executing an FT agreement with CEI North which fulfills the proposed facility's intrastate gas FT needs. Cost recovery of the contracted intrastate FT for the Cayuga CC Project is expected to be recovered through Duke Energy Indiana's future quarterly FAC proceedings.

IV. SUFFICIENCY OF GAS TRANSPORTATION TO THE PROPOSED FACILITY

Q. DOES DUKE ENERGY INDIANA HAVE SUFFICIENT NATURAL GAS FT CAPACITY TO PROVIDE FUEL SECURITY AND TO ENSURE RELIABLE OPERATION OF THE CAYUGA CC PROJECT?

A. Yes. The Company has contracted to enable sufficient intrastate FT natural gas capacity to support the proposed facility. The Company has also contracted to enable sufficient interstate FT natural gas capacity to support the Cayuga CC Project's natural gas demand requirements in addition to the Company's existing gas generation fleet. These incremental interstate FT volumes help provide adequate fuel security for the Company's entire natural gas generation fleet, which, in turn, supports maintaining system reliability. Table 1, below, outlines the Company's contracted term interstate FT rights (supply).

Table 1: Duke Energy Indiana – Term Interstate FT Rights

Pipeline	Station(s) Served	FT Rights (MMBtu/Day)
Midwestern Pipeline Company (MGT)	Wheatland, Vermillion,	52,800
	Edwardsport IGCC	28,000
Panhandle Eastern Pipeline Company (PEPL)	Cayuga CT, Noblesville	45,000
ANR Pipeline (ANR)	Henry County	22,000
Rockies Express (REX)	Madison	50,000
	Existing Term Interstate FT	**197,800**
Rockies Express (REX)		
East to West Path	Caygua Energy Complex, All other DEI NG stations	110,000
West to East Path	Caygua Energy Complex, All other DEI NG stations	130,000
	Newly Contracted Term Interstate FT	**240,000**
	Total Term Interstate FT Rights	**437,800**

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?

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: 

Date: 02/13/2025