

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Natural Gas Rates.)) Case No. 22-507-GA-AIR

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of an Alternative Form of Regulation.)) Case No. 22-508-GA-ALT

In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.)) Case No. 22-509-GA-ATA

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.)) Case No. 22-510-GA-AAM

SUPPLEMENTAL TESTIMONY OF

BRIAN R. WEISKER

ON BEHALF OF

DUKE ENERGY OHIO, INC.

IN SUPPORT OF SETTLEMENT

_____ Management policies, practices, and organization

_____ Operating income

_____ Rate Base

_____ Allocations

_____ Rate of return

_____ Rates and tariffs

 X Other: Settlement

May 4, 2023

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ATTACHMENTS

BRW-SUPP-1 Work Authorization Permit and Control Room Log

BRW-SUPP-2 Transfer Memorandum

I. INTRODUCTION

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

2 A. My name is Brian R. Weisker, and my business address is 4720 Piedmont Row
3 Drive, Charlotte, North Carolina 28210.

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

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Senior Vice
6 President, Chief Operating Officer Natural Gas. DEBS provides various
7 administrative and other services to Duke Energy Ohio, Inc. (Duke Energy Ohio or
8 Company) and other affiliated companies of Duke Energy Corporation (Duke
9 Energy).

10 **Q. ARE YOU THE SAME BRIAN R. WEISKER WHO FILED DIRECT**
11 **TESTIMONY IN THESE PROCEEDINGS?**

12 A. Yes.

13 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY IN**
14 **THESE PROCEEDINGS?**

15 A. My Supplemental Direct Testimony describes and supports the Stipulation and
16 Recommendation filed on April 28, 2023, (Stipulation) in these proceedings. In
17 doing so, I support the operational retirement of the Company's propane air
18 facilities and propane cavern deferral (Propane Facilities) as set forth in the
19 Stipulation, as well as the reasonableness of the agreed-upon revenue caps for the
20 Company's Capital Expenditure Program Rider (Rider CEP) as it relates to the
21 investments necessary to the provision of safe and reliable natural gas service to
22 customers.

II. DISCUSSION

A. OVERVIEW OF THE COMPANY'S APPLICATION

1 **Q. PLEASE BRIEFLY DESCRIBE DUKE ENERGY OHIO'S APPLICATION**
2 **AND THE EVENTS LEADING TO THE STIPULATION FILED IN THESE**
3 **PROCEEDINGS.**

4 A. As more fully explained by Company witnesses Amy Spiller and Sarah Lawler, on
5 June 30, 2022, Duke Energy Ohio filed an Application seeking a review of its
6 natural gas rates. The Company's Application proposed to increase annual base
7 revenues by approximately \$49 million, which equated to an approximate 5.6
8 percent average increase to a customer's total bill. The Company's rate base has
9 increased by over \$1 billion since its last natural gas base rate proceeding, reflecting
10 investments to provide safe and reliable natural gas service. The Company's
11 Application was based upon a full calendar-year test period spanning the twelve
12 months beginning January 1, 2022, and ending December 31, 2022. This test year
13 consists of three months of actual data and nine months of forecasted data. Rate
14 base is calculated using actual data as of March 31, 2022 (the date certain). Among
15 other things, the Application proposed to roll into base rates and reset Rider CEP,
16 including resetting of annual rider caps.

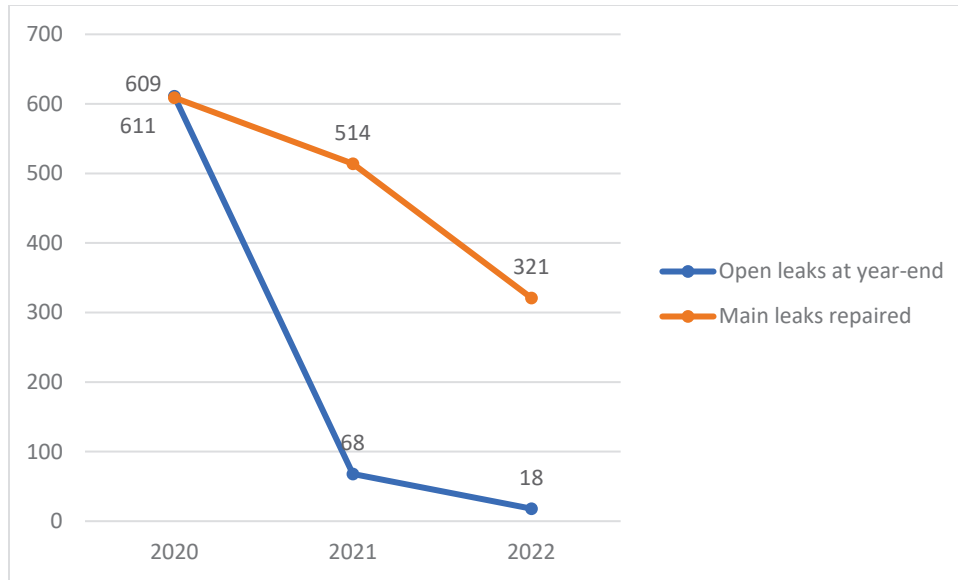
17 My testimony in support of the Stipulation will focus on both Rider CEP
18 and issues relating to the Company's propane caverns.

1 **Q. PLEASE BRIEFLY EXPLAIN THE COMPANY’S RIDER CEP.**

2 A. As more fully explained by Ms. Lawler, Rider CEP was approved to recover the
3 deferred post-in-service carrying costs, incremental depreciation expense, and
4 property tax expense, as well as a return on and of specific categories of natural gas
5 system investments, incremental to base rates. These investments include, but are
6 not limited to, infrastructure expansion, improvement and replacement programs,
7 upgrades and replacements to technology systems, and investments to comply with
8 regulatory rules and regulations.

9 **Q. PLEASE EXPLAIN HOW CUSTOMERS BENEFIT FROM THE**
10 **INVESTMENTS THAT ARE ELIGIBLE FOR RECOVERY THROUGH**
11 **RIDER CEP.**

12 A. As I described in my direct testimony, integrity management program initiatives
13 for the transmission integrity management program (TIMP) and distribution
14 integrity management program (DIMP) are required by federal regulations and
15 ensure that the Company’s natural gas infrastructure is fit for service. TIMP and
16 DIMP directly impact the safety, reliability, and efficiency of the Company’s
17 natural gas delivery system in a positive manner. These programs are iterative and
18 continuing insofar as the Company must regularly evaluate its system to identify
19 threats and take action to mitigate any perceived weaknesses. The capital invested
20 as part of the TIMP and DIMP is recoverable through the Company’s Rider CEP,
21 provided the cap on that year’s rates has not been reached. The natural gas delivery
22 system has seen remarkable gains in reliability and safety as a result of these
23 programs, as evidenced by system leak reductions over the past three years:



1 The Company must continue to plan for system replacements and
2 expansions to strive to have sufficient capacity and capability to maintain system
3 pressures during extreme weather events. As recently as this past winter, the
4 Company’s natural gas delivery system was tested during Winter Storm Elliot.
5 Although the natural gas system was stressed and reached just over 90 percent of
6 design-day volumes, the system was able to maintain sufficient pressures and flows.
7 This was due in large part to the following capital projects, all of which were
8 eligible for recovery through the CEP program: pressure testing of Line CG04,
9 construction of the Race & Reemelin Metering and Regulating (M&R) Station,
10 construction of the looping project on Line C164, construction of the Line SS00
11 pipeline on Roundbottom Road, construction of the Liberty M&R Station,
12 construction of the Butler County Phase I project on Lines C210 and LP07,
13 construction of the REX M&R Station, construction of the Mason M&R Station,
14 and construction of the Central Corridor Pipeline.

1 Rider CEP is important from a cash flow perspective to ensure that the
2 Company is able to continue to make investments such as these in a timely manner,
3 while allowing gradual adjustments in customer rates. This approach mitigates the
4 large one-time increases that occur when base rates are adjusted during a time-
5 consuming and expensive base rate proceeding. Customers benefit from rate
6 stability and certainty under the Rider CEP construct.

7 **Q. WHAT DID THE COMPANY PROPOSE IN ITS APPLICATION AS IT**
8 **RELATES TO CAPS ON RIDER CEP?**

9 A. As part of its Application and consistent with prior settlements, the Company had
10 proposed to incorporate or “roll in” to base rates existing Rider CEP investments
11 made since the rider’s implementation, and to reset and continue the rider. As Ms.
12 Lawler explains, the Company also proposed some adjustments related to the reset
13 in base rates and the continuance the existing deferral authority. Finally, as it relates
14 to Rider CEP, the Company proposed to reset the annual Rider CEP residential rate
15 caps to \$3.00 for 2022 vintage investments and to a \$5.00 annual cap for each year
16 thereafter.

17 **Q. DOES THE STIPULATION ADDRESS THE RIDER CEP CAPS?**

18 A. Yes. As discussed later in my testimony, the Signatory Parties negotiated and
19 agreed to Rider CEP residential rate caps for investments made in calendar years
20 2022 through 2027.

1 **Q. PLEASE BRIEFLY EXPLAIN THE PURPOSE AND USE OF THE**
2 **COMPANY'S PROPANE FACILITIES.**

3 A. As I explained in my Direct Testimony, since as early as 1959, Duke Energy Ohio
4 has used its Propane Facilities, consisting of propane storage and peaking facilities,
5 to provide a seasonal source of gas supply and to support system pressures during
6 the winter heating season. These facilities consisted of underground storage
7 caverns and associated propane-air facilities located at the Company's East Works
8 location and propane-air facilities at the Company's Dick's Creek location. The
9 East Works facilities includes an eight-million-gallon, man-made, underground
10 storage cavern.

11 In terms of the operation of the Propane Facilities, the cavern-stored liquid
12 propane was first vaporized and mixed with compressed air. Thereafter, it was
13 injected into the natural gas distribution system to maintain pressure and provide
14 additional volume required by Duke Energy Ohio customers. Importantly, so that
15 the plants could function properly, there had to be natural gas flowing across the
16 system with which the propane could be mixed. This was necessary because
17 propane has different combustion dynamics than natural gas and appliances and
18 equipment that are configured to burn natural gas cannot safely or efficiently burn
19 a gas stream that is comprised primarily of propane.

20 Initially, these plants functioned to provide a seasonal and constant source
21 of supply during the winter heating season. However, as the network of natural gas
22 pipelines comprising the Company's system grew over time, its ability to meet
23 seasonal demand without constant reliance on these plants increased. For the last

1 several decades, the Company relied on these Propane Facilities for peaking
2 services during periods of time when system demand was at its highest. They
3 contributed approximately 10 percent of the supply needed to serve the firm, heat-
4 sensitive customer demand on peak days. These Propane Facilities supplemented
5 Duke Energy Ohio's natural gas supply and system pressure on peak days; that is,
6 they supplemented the supply and the pressure on days during the winter heating
7 season on which customers were using large amounts of natural gas to heat their
8 homes and operate their businesses, generally due to very cold weather. In addition,
9 these facilities provided emergency service during the spring and fall months, in
10 the event there was a sudden pressure loss or imbalance.

11 Following the completion and placing into service of the Company's
12 Central Corridor Pipeline on March 14, 2022, and the conclusion of the 2021/2022
13 natural gas winter heating season, the Company was able to commence actions to
14 start the retirement of the Propane Facilities. These facilities were used, as
15 designed, throughout the 2021/2022 winter heating season to inject propane into
16 the Company's natural gas delivery system to maintain system pressures and
17 continue providing fuel for customers to heat their homes. The stored propane at
18 the East End site was injected into the natural gas delivery system through February
19 2022, and the facilities remained in service and continued to provide necessary
20 emergency back-up service to customers for the first full month of operation of the
21 Central Corridor Pipeline until the Propane Facilities were disconnected from the
22 natural gas system on April 12, 2022. To this end, Attachment BRW-SUPP-1 is a
23 true and accurate copy of the work order and control room log showing that the

1 Propane Facilities were air-gapped, meaning disconnected from the system,
2 effective April 12, 2022. Attachment BRW-SUPP-2 is the transfer letter that
3 officially turned over the assets from the Natural Gas Business Unit's oversight to
4 that of Duke Energy's Plant Demo and Retirement organization for the
5 commencement of decommissioning activities. As it notes, the Propane Facilities
6 were retired April 15, 2022.

7 To safely allow for the decommissioning of these Propane Facilities, the
8 Company began to flare off the remaining propane in those caverns during the
9 summer of 2022, completing that work in late August. In the fall of 2022, following
10 the completion of the flaring of propane stored in the cavern, the cavern shafts, used
11 to inject and remove propane from the cavern, were grouted closed.

12 **Q. WHAT DID THE COMPANY'S APPLICATION PROPOSE AS IT**
13 **RELATES TO THE PROPANE FACILITIES?**

14 A. Consistent with the Commission's order in Case Nos. 21-986-GA-ABN and 21-
15 1035-GA-AAM (Propane Facilities Deferral Case), Duke Energy Ohio was
16 authorized to abandon the Propane Facilities and create a deferral for certain costs
17 related to the Propane Facilities. Ms. Lawler's testimony discusses that deferral in
18 detail.

19 **Q. DOES THE STIPULATION ADDRESS THE PROPANE FACILITIES?**

20 A. Yes, it does, as I explain below.

B. OVERVIEW OF THE SETTLEMENT

1 **Q. HAVE YOU REVIEWED THE STIPULATION FILED IN THESE**
2 **PROCEEDINGS?**

3 A. Yes. I reviewed the Stipulation, and I participated in the settlement negotiations
4 that arrived at the total settlement package that included the final Rider CEP
5 provisions and provisions relating to the Propane Facilities.

6 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE SIGNIFICANT**
7 **TERMS OF THE STIPULATION AS IT RELATES TO RIDER CEP.**

8 A. Ms. Spiller and Ms. Lawler explain and support the Stipulation in terms of its
9 reasonableness, how it resolves all issues in these proceedings, and how it satisfies
10 the Commission’s three-part test for approval of regulatory settlements. Ms. Lawler
11 also discusses the accounting and rate impact aspects of the settlement package,
12 including the resolution of Rider CEP.

13 As it relates to Rider CEP, the Stipulation provides that Rider CEP should
14 continue as proposed in the Application and as modified by the Staff Report for
15 investments made through 2027, and the Company’s proposal to “roll-into base
16 rates” and reset Rider CEP should be approved, subject to a few negotiated
17 modifications. The Signatory Parties agree that Rider CEP should be subject to
18 annual residential rate caps for the investments made during the calendar years set
19 forth below:

<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
\$2.25	\$2.25	\$1.53	\$1.00	\$1.00	\$1.50

1 **Q. HOW LONG WILL THE RIDER CEP CAPS BE IN EFFECT?**

2 A. Rider CEP will be subject to the above-described annual residential rate caps, at a
3 minimum, until the effective date of Duke Energy Ohio's next natural gas base rate
4 case application and/or alternative rate application to modify and/or extend Rider
5 CEP. Rider CEP will be reset to zero by the later of October 31, 2029, or upon full
6 recovery of the vintage 2027 investments subject to the 2027 Rider CEP residential
7 rate cap unless the Company files a natural gas base rate case or alternative rate
8 application.

9 **Q. ARE THE AGREED-UPON RIDER CEP CAPS REASONABLE?**

10 A. Yes. Rider CEP Caps are a reasonable component of the overall settlement. These
11 negotiated caps allow the Company to continue to make critical investments in its
12 natural gas infrastructure and timely recover for them with modest, measured
13 annual increases in customer rates. The annual caps were negotiated to align with
14 the Company's forecasted capital investments for the next several years, thereby
15 enabling these planned investments that are necessary to provide safe, reliable, and
16 reasonable service to Duke Energy Ohio's customers.

17 **Q. PLEASE EXPLAIN HOW THE STIPULATION RESOLVES ISSUES**
18 **RELATED TO THE COMPANY'S PROPANE FACILITIES.**

19 A. As more fully explained by Ms. Lawler, consistent with the Stipulation and
20 Recommendation approved by the Commission in the Propane Facilities Deferral
21 Case, the Stipulating Parties agree that the deferral related to the Propane Facilities
22 should be amortized in base rates, without a return, for ten years.

1 **Q. HAS THE COMPANY PERFORMED REGULAR MAINTENANCE ON**
2 **THE PROPANE FACILITIES SINCE THE COMPANY’S LAST NATURAL**
3 **GAS RATE CASE?**

4 A. Yes. These facilities were subject to annual maintenance as necessitated under
5 Code 59 of the National Fire Protection Association and 49 Code of Federal
6 Regulations, Part 195. Although certain components of the plants are original, other
7 components have been replaced or upgraded to enable their continued, safe
8 operation. While there is no maintenance possible to the caverns themselves given
9 that they comprise mined limestone, the cavern pressure is continuously monitored.
10 Additionally, cavern equipment, such as lines and submersible pumps, is subject to
11 regular inspection and maintenance. In this regard, the lines undergo corrosion
12 inspections and, as necessary, recoating.

13 **Q. HAVE THE PLANTS BEEN UPGRADED SINCE THEY WERE**
14 **INITIALLY PUT IN SERVICE?**

15 A. Yes. Any plant requires maintenance and, as appropriate and necessary, upgrade.
16 The propane-air peaking plants were no different. Thus, over the course of their
17 operation, the plants were upgraded through the introduction of newer technologies.
18 For example, the original vaporizer system was replaced with a more efficient
19 system and automated valves were substituted for manual valves. Further, detection
20 equipment, chart recorders, and compressor lubrication systems were added to the
21 plants. In order to keep these facilities operational, the Company invested \$12.4
22 million in capital since March 31, 2012, the date certain in the Company’s last
23 natural gas base rate case.

1 As part of my Direct Testimony submitted in these proceedings, I supported
2 the East Works Gas Plant Engineering Study performed by EN Engineering that
3 analyzed the various investments the Company has made at the Propane Facilities
4 since the last natural gas rate case.¹ The purpose of this study was to determine the
5 necessity, prudence, and reasonableness of the investments for the Propane
6 Facilities' continued safe operations.

7 **Q. PLEASE EXPLAIN THE STATUS OF THE PROPANE FACILITIES**
8 **DURING THE TEST YEAR IN THESE PROCEEDINGS AS IT RELATES**
9 **TO DUKE ENERGY OHIO'S PROVISION OF NATURAL GAS SERVICE**
10 **TO ITS CUSTOMERS.**

11 A. These facilities have been used and very useful and beneficial to customers in
12 providing natural gas system support for meeting seasonal and, more recently,
13 peak-day demands on the system. The Propane Facilities, however, became
14 antiquated, near the end of their life, and in need of replacement. Consequently, the
15 Company took steps to construct the Central Corridor Pipeline, to maintain safe,
16 reliable and reasonable service for natural gas customers without continued reliance
17 on propane.

18 As I stated above and in my Direct Testimony, the Central Corridor Pipeline
19 went into service on March 14, 2022. As described earlier in this testimony, the
20 Company began taking steps in April 2022 to take these facilities out of service so
21 it could begin decommissioning and the eventual abandonment of them. These

¹ See Direct Testimony of Brian R. Weisker, Attachment BRW-1. July 14, 2022.

1 steps were initiated only after the in-service date of the Central Corridor Pipeline
2 and after the date certain in these proceedings.

**III. STANDARD FOR CONSIDERING THE
REASONABLENESS OF A STIPULATION**

3 **Q. ARE YOU FAMILIAR WITH THE CRITERIA USED BY THE**
4 **COMMISSION WHEN CONSIDERING APPROVAL OF A**
5 **STIPULATION?**

6 A. Yes. As I understand, the Commission will approve a stipulation when, as a total
7 package, it (1) is the product of serious bargaining among capable, knowledgeable
8 parties; (2) does not violate any important regulatory principle or practice; and (3)
9 benefits customers and the public interest.

10 **Q. DO YOU BELIEVE THAT THE SETTLEMENT PACKAGE, WHICH**
11 **INCLUDES THE RESOLUTION OF RIDER CEP AND THE PROPANE**
12 **FACILITIES, MEETS THIS THREE-PART TEST?**

13 A. Yes. As I was involved in the settlement negotiations and attended nearly every
14 meeting, I can confirm that the settlement was the product of serious bargaining
15 among capable and knowledgeable parties. There were multiple meetings where all
16 issues in the case were discussed, with parties raising complex regulatory and
17 operational issues that were of importance to them. The Stipulation presents a
18 resolution of those issues among the settling parties.

19 As to the violation of important regulatory principles or practices, I can say
20 that, based upon my experience in operating the natural gas business unit, the
21 settlement does not run afoul of any safety or operational regulation with which
22 Duke Energy Ohio must comply as a natural gas utility. In fact, the settlement,

1 particularly as it relates to the continuation of Rider CEP, will allow the Company
2 to continue to make the investments necessary to comply with applicable
3 regulations and receive timely recovery of those investments, with reasonable
4 annual caps that help mitigate costs to customers. As the settlement relates to the
5 Propane Facilities, those assets and the investments made to keep them operational
6 constituted necessary, reasonable, and prudent expenses to enable the Company to
7 continue to provide safe and reliable natural gas service, maintain system pressure,
8 and provide emergency and peaking support during extreme weather conditions and
9 system emergencies until they were taken out of service on or about April 15, 2022,
10 as shown on BRW-SUPP-1. Customers benefitted from the existence and
11 availability of these assets, including throughout the 2021/2022 winter heating
12 season, when the propane was injected into the natural gas delivery system through
13 February 2022, until they were taken out of service in April 2022. The recovery of
14 these expenses, as resolved through the Stipulation, provides the Company with a
15 return of its investment, without a return on that investment, including the ongoing
16 decommissioning costs that are necessary as part of the provision of natural gas
17 service to customers.

18 Finally, as it relates to the customer benefits and public interest element of
19 the settlement package, I believe the Stipulation satisfies that condition. The
20 Stipulation provides certainty both to customers and to the Company as to the level
21 of rate increases and resolves the complex issues raised in these proceedings. Ms.
22 Lawler explains that the Stipulation provides for an overall lower revenue
23 requirement, return on equity, and annual caps for Rider CEP, as compared to what

1 the Company requested in its Application. As Ms. Lawler explains further, the
2 Stipulation provides benefits to enhance the competitive natural gas market in the
3 Company's service territory by reducing or eliminating certain costs for suppliers,
4 which in turn should benefit those customers who shop for their natural gas
5 commodity.

6 Finally, the Stipulation provides certainty to Duke Energy Ohio as it relates
7 to cost recovery of historic investments made to provide safe and reliable natural
8 gas service to customers and, if approved without material modification, will allow
9 the Company sufficient revenues to continue its provision of safe, reliable, and
10 necessary natural gas service, while affording the Company an opportunity to
11 continue to receive timely recovery of a portion of its capital investments.

IV. CONCLUSION

12 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT**
13 **TESTIMONY?**

14 **A. Yes.**



Archived Work Authorization Permit

[Archived] 163 - 3/29/2022 - Botts, Nathaniel

Site Information: **Approved**

ID#: 5211

WAP Number: 163

Permit Written By: Chadd.Sommerfield@duke-energy.com

Permit Updated By: Nathaniel.Botts@duke-energy.com 04/04/2022 09:09:04 AM

Permit Completed By: Henderson, Allen - Approve - 04/06/2022

Task Type: Tier 4 - Misc/General

PMOC Type: No PMOC Type Selected

Task Type: Tier 4 - Misc/General	Current WAP Step: Not Started
Operations Center: OH/Kellog	Location Address: 2847 Riverside Dr Cincinnati, Oh 45226
In Charge of Work: Nathaniel.Botts@duke-energy.com	Project Manager:
Line Numbers: N000-1880, D000-3500, E000	
Start GPS Coordinates: LAT: LONG:	End GPS Coordinates: LAT: No Coordinates Available LONG: No Coordinates Available
Preliminary Work Date: 4/7/2022	Target Completion Date: 4/11/2022
Estimated Work Duration: 4 Day(s)	Actual Completion Date: 4/12/2022
Attached Contingency Plan?: No	Measurement Required?: Yes
System Configuration Pework Required?:	SCADA Required?: No
Buried Pipeline Exposed During WAP?: No	Preliminary MAOP?: No
LOTO Required?: Yes	

Approvals: Approved

Approval Stage	Approver
WAP Implementer	Botts, Nathaniel - Approve - 04/04/2022
Measurement	Gilbert, David - Approve - 04/05/2022
SCADA	N/A
Technical	Rennie, Gordon Ewan - Approve - 04/06/2022
System Planning	Brisset, Dustin D - Approve - 04/04/2022
Gas Control	Mollet, Christy M. - Approve - 04/06/2022
Management	Henderson, Allen - Approve - 04/06/2022

Description: Approved

Isolate small section of Line D IP and Line N @ Eastern Propane Facility, remove spool pieces, and blind flange to make permanent separation of propane and natural gas assets.

LOTO Information: Approved

LOTO Group Required?: Yes

LOTO Group Type?: Type B - Lock Box

LOTO Authorized Employee(s) / Lock ID(s)

Authorized Employee (Print)	Lock ID(s)	Authorized Employee (Print)	Lock ID(s)

Environmental Data for Blowdowns: Approved

Pipe Diameter (In Inches): 24

Pipe Length (In Feet): 100

Pressure (In PSIG): 30

Pipe Temperature (In Deg F): 60

Flare?: No

Recapture?: No

Reason for Blowdown?: Pipe Abandonment

Amount of Natural Gas Released (cf/NG):

Measurement Pre-Work: Approved

Date for Measurement work to occur: 4/4/2022

Preliminary work for Measurement:

Measurement approval needed along with removing the transmitter connections line for STREET.IP.PRS.

System Operations Pre-Work:

Date for System Operations Pre-Work to occur:

System Operations Pre-Work Notes:

Restrictions: Approved

Pre-Existing Work: N/A

Weather Conditions: N/A

Average Ambient Temperature: 40 degrees.

Min and Max Pressure Limits: Line N: Maintain 50 PSIG delivery pressure into Grandin HP system (MAOP 60 PSIG), assumed to be approximately 75 PSIG inlet on line N (MAOP: 100 PSIG). IP: Maintain 20 PSIG, MAOP 35 PSIG.

Supply Issues:

Back Feeds: IP System: Front and Rose IP and Erie IP must be set to at least 26 PSIG, Set Point on Beechmont Court to be verified by TFO, approximately 20 PSIG. Line N: Feed from Norwood, pressure at Grandin HP to be verified by gauge (Gas Control can watch Robertson Rd as well). If line N does not hold, quantity 3-4" bypasses can be fed from line D via throttling upstream valve. Mason flows can be managed by putting Line W on Winton Rd Station.

Activities Prior to Work Checklist: Approved

This section is captured in the field and has no saved data as it is entered by hand and not saved electronically.

- Notify Gas Control (704-731-4253) and schedule a day when weather conditions are favorable.
- Have new fabrication and components pre-tested, cleaned and X-rayed where applicable.
- Check that all valves needed for this Permit are operable and maintained, including both up and down stream isolation valves.
- Have all materials on hand and ready including necessary gauges, valve keys, grease gun, wheel cutters, Combustible Gas Indicator (CGI), evacuators, Yale adapters, pre-tested pipe, hoses, (1) air compressor and fire extinguishers.
- Schedule the contractor, X-ray and PNG Regulator/Measurement for the morning of this Permit.
- Contact System Integrity to turn off rectifiers, if necessary.
- Preliminary MAOP Approved by System Planning Engineer? (Duplicate Check for Critical Work)

Date of Approval: _____

System Planning Engineer Name: _____

Commission Gate Approval by Project Director? (Duplicate Check for Critical Work)

Date of Approval: _____

Project Director Name: _____

Identification of valve positions prior to Work Authorization Permit implementation:
Approved

- Valve position are to be locked or attended continuously once WAP position established.
- If any changes in operation or execution of the WAP, stop and notify.

Open Valves: 577, 52344, G-251, G254, G-258. G-261, D000-0030, 52347,52348,52349, D000-0029,G-272, G-273, G-275, G-270 PA136, PA44, N000-0019 PA101A

Closed Valves: PA126 & PA127, N19A, N19B PA101, PA102, PA103, PA104, PV132, A104, PA1 G264, G257, D30A, D30B G-162, 13847, N26, PV101, PV105, PV130, PV131, PV132, A102, A101, A2,A4, PV31, PV30, PR-3, A1, PP1, PP2

Activities During Work Authorization Permit Execution: Approved

Instructions

- Complete Work Authorization Permit Safety Checklist
- Notify Gas Control, 704-731-4253, and verify pressures

Gas Control Person Contact:	
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Monitor Point Pressure During Work

Name/Location	PSI
---------------	-----

- Contact Piedmont Service Scheduling at 1-888-370-8937 to notify of controlled release of gas
- Contact the nearest Fire Station or 911 to notify of controlled release of gas
- Establish communication between all personnel
- Install gauges both up and downstream of work
- Begin Work Authorization Permit per approved design

Time	Step Info
1.	<p>THE FOLLOWING STEP WILL ISOLATE LINE D AND ALLOW FOR SEPERATION OF PROPANE INTO LINE D FROM LINE D NATURAL GAS.</p>

1. Perform PJB
2. Contact Gas Control, start WAP
3. Verify G-257 and G-264 are closed
4. Close G-251, G-254, G-258, and G-261
5. Close IP Distribution Valves – 52347, 52348, and 52349
6. Monitor system for 10 – 15 minutes to ensure system integrity. Notify Gas Control of valve closures.
7. Verify valve PA-01, PA-02, PA-126, and PA-127 are closed
8. Blow down isolated line D @ 1" blow down in flow tube pit, **until 0 psig pressure on the line**
9. Verify no pressure building @ transmitter on orifice plate
10. Ensure valve PR3 is closed
11. Ensure automatic shutdown valve PV30 is open
12. Ensure valve PV31 Vapor Flow Control valve is open
13. Ensure duplex valve PV32 is open
14. Inject N2 at 1/2" valve cavern side of PV 30 and build pressure to >15psig
15. Blow down at 2" PP2 valve in basement to near 0psig and repeat steps 14 and 15 three times or until 3 consecutive reads of near 0% gas @ 3-minute intervals
16. Close automatic shutdown valve PV30
17. Ensure valve A1 is closed
18. Ensure automatic shutdown valve A2 is open
19. Ensure duplex valve A4 is open
20. Inject N2 at 1/2" valve downstream of valve A1 and build pressure to >15psig
21. Blow down at 2" PP2 valve in basement to near 0psig and repeat steps 20 and 21 three times or until 3 consecutive reads of near 0% gas @ 3-minute intervals
22. Close valve A2
23. Remove spool piece between PA-01, PA-02, and orifice plate
24. Blind flange valve PA-01 and PA-02
25. **THIS WILL COMPLETE THE SEPERATION OF LINE D NATURAL GAS FROM PROPANE AIR**
26. **THE BELOW STEPS WILL PURGE LINE "D" BACK INTO SERVICE**
27. Crack Valve 52349 and back feed system to purge line D with IP pressure, verifying near 100% gas via 3 consecutive reads @ 3-minute intervals @ BD1 which is vented outside the building structure (Bleed on Line D between run with PA-01 and run with PA-126), along with BD2 (1" Blow down in flow tube pit), closing valves as successful readings are achieved.
28. Once Line "D" is purged to 100% gas, throttle valve 52349 to bring line D to operating pressure. TFO to monitor system to ensure not bringing system down during this operation.
29. Once Line "D" @ operating pressure, open 52349, 52348, and 52347
30. Open G-251, G-254, G-258, and G-261 – this will put line "D" back in operation for the IP distribution system
31. Pause WAP until we return to complete the Line N separation.

During the Line "D" operation we will do some testing for Line "N" and holding up the system at Grandin 60# station.

Once Line D is blown down (STEP 8) the following steps can take place at any time before bringing line D back to operating pressure (STEP 26).

- 1. Staff an operator at Grandin Station 60# system with a gauge point on the inlet & outlet and valve key in place prepared to throttle the bypass. With an additional operator in constant communication with operator at N000-0019.**
- 2. Contact Gas Control, let them know we are closing out Line N @ Eastern Ave Plant**
- 3. Close valve N000-0019**
- 4. Monitor the system and throttle bypass valve(s) N26 & 13847 at Grandin 60# system as needed.**
- 5. If at any time, system drops below normal operational pressure of 50psig, at Grandin or valve N000-0019, they will open valve N000-0019 and bring line N back to operation.**

This portion of testing is needed to determine bypass needs for separating Line "N" and the number of bypasses. The tentative plan for separating Line N from propane will be to complete the work on Monday 4/11/2022.

THE FOLLOWING STEPS WILL ISOLATE LINE N AND ALLOW FOR SEPERATING OF PROPANE INTO LINE N FROM THE LINE N NATURAL GAS.

- 1. Perform PJB**
- 2. Contact Gas Control – resume wap, inform Eastern Ave IP from Line D along with Line N from the south will be shutdown. Have gas control back off Eastern Ave IP and Eastern Ave First Stage from Line D**
- 3. Setup proper rated bypass hoses from D000-0030A to N000-0019B. TFO will monitor these valves to remain closed until ready to operate to avoid over pressurization on Line N which has MAOP of 100 psig.**
- 4. Close G-275, G-272, G-273, G-270, D30 - Steps added after emergency meeting during line D section of WAP on 4/7/2022.**
- 5. Have operator at Grandin 60# system with gauge up and valve key on bypass valves throttling as needed.**
- 6. Have operator at valve D000-0029 to throttle to 90 – 95 psig located @ 4157 Kellogg Ave Cincinnati, OH 45226 to throttle if system does not hold as expected @ Grandin 60# system.**
- 7. Bypass (3 – 4" hoses) @ D30 and N19 will only be used if Grandin system is not upheld via station bypass. Before opening D30A & B and N19A & B, TFO will ensure Line D is throttle to 90- 95 psig.**
- 8. Verify PA-126, PA-127, PA-101 are closed**
- 9. Close PA101A**
- 10. Remove Pressure Indicator from PA-101A and verify valve is holding**
- 11. Remove 2" Flange on outlet of PA-101A and pipe to safe area**
- 12. Close PA-44 and PA-136**
- 13. Open valve PA-102**
- 14. Blow or flare gas from high pressure mixing vessel to near 0 psig at PP1.**
- 15. Close all valve used for flaring at PP1.**
- 16. Close valve PA-102**
- 17**

18. Monitor system and verify no pressure is building @ pressure indicator at orifice plate for 15 minutes
19. Ensure valve PV101 is closed
20. Ensure valve PV105 is closed
21. Ensure valve PV130 is open
22. Ensure valve PV131 is open
23. Ensure duplex valve PV132 is open
24. Inject N2 at 1/2" valve downstream of PV101 and build pressure to > 15psig
25. Blow down at 2" valve in basement, tagged PP1, to near 0psig and repeat steps 23 and 24 three times or until 3 consecutive reads of near 0% gas @ 3-minute intervals
26. Close valve PV130
27. Ensure valve A101 is closed
28. Ensure valve A102 is open
29. Ensure duplex valve A104 is open
30. Inject N2 at 1/2" valve downstream of valve A101 and build pressure to > 15psig
31. Blow down at 2" valve in basement, tagged PP1, to near 0psig and repeat steps 29 and 30 three times or until 3 consecutive reads of near 0% gas @ 3-minute intervals
32. Close valve A102
33. Remove spool piece between PA-101 / PA-102 and orifice plate
34. Blind flange PA-101 and PA-102
35. Purge Line N from PA-136 with the following steps
36. Crack PA-136 purging system achieving near 100% gas via 3 consecutive readings @ 3-minute intervals, checking @ PA-101A and valve on drilled and tapped blind flange just installed at PA-101 & PA-102, and closing valves as successful readings achieved.
37. Open PA-44, PA-136, reinstall pressure indicator @ PA-101A
38. Verify system is operational and valves are in normal operating positions.
39. Contact Gas Control – inform WAP Complete.

Identification of valve positions at completion of authorization permit implementation:

Approved

Open Valves: PPA101, PA102, PA103, PA104, PV132, A104, D30A, D30B, N19A, N19B, PA126, PA127 PA01, PA02, PV32, A4 G-162, G264, G257, 13847, N26, PV101, PV105, PV130, PV131, PV132, A102, A101, A2,A4, PV31, PV30, PR-3, A1, PP1, PP2

Closed Valves: PPA101, PA102, PA103, PA104, PV132, A104, D30A, D30B, N19A, N19B, PA126, PA127 PA01, PA02, PV32, A4 G-162, G264, G257, 13847, N26, PV101, PV105, PV130, PV131, PV132, A102, A101, A2,A4, PV31, PV30, PR-3, A1, PP1, PP2

Activities at Completion of Work Authorization Permit: Approved

Instructions

- Notify Gas Control, 704-731-4253, and verify pressures

Gas Control Person Contact:	
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Monitor Point Pressure at Completion

Name/Location	PSI
IP: ERX Heatherhill Lane	
SP ERX: Golden Ave	
SP ERX: Tusculum	
IP: SCADA Eastern Street	
N: SCADA Robertson Rd	
N Gauge: Grandin HP	
IP SCADA: Hyde Park	

WAP Approval Comments:

Operating Permit Safety Checklist: Approved

<u>Permit</u>	<u>Electrical</u>	<u>Welding / Burning</u>	<u>Identified Hazards</u>
<input type="checkbox"/> Confined Space Type:	<input type="checkbox"/> Equipment Inspected / Approved	<input type="checkbox"/> Equipment Inspected / Approved	<input type="checkbox"/> Asbestos
<input type="checkbox"/> Hot Work	<input type="checkbox"/> Proper Ground Fault Protection	<input type="checkbox"/> Combustibles Identified	<input type="checkbox"/> Arsenic
<input type="checkbox"/> Lock Out / Tag Out	<input type="checkbox"/> Power Source Separation	<input type="checkbox"/> Use of Welding Screens	<input type="checkbox"/> Dust
Clearance Permit Required: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Proper Lighting	<input type="checkbox"/> Use of Fire Blankets	<input type="checkbox"/> Surface Temp.
Clearance Permit Issued: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Power Source Lock Out / Tag Out	<input type="checkbox"/> Fire Watch	<input type="checkbox"/> Heat Stress
<input type="checkbox"/> Other	<input type="checkbox"/> Cable/Wire/Cord Routing	<input type="checkbox"/> Fire Extinguisher Location	<input type="checkbox"/> Noise Level

<u>Personal Protective Equipment</u>	<input type="checkbox"/> Other	<input type="checkbox"/> Proper Ventilation	<input type="checkbox"/> Sharp Objects
<input type="checkbox"/> Hard Hat	<u>Fall Protection</u>	<input type="checkbox"/> Equipment Grounded	<input type="checkbox"/> Others In Area
<input type="checkbox"/> Face Shield	<input type="checkbox"/> Safety Harness	<input type="checkbox"/> Proper Clothing / PPE	<input type="checkbox"/> Housekeeping
<input type="checkbox"/> Welding Shield	<input type="checkbox"/> Proper Anchorage Points	<input type="checkbox"/> Other	<input type="checkbox"/> Bumps
<input type="checkbox"/> Gloves	<input type="checkbox"/> Lanyards	<u>Rigging</u>	<input type="checkbox"/> Falls
<input type="checkbox"/> Respirator Type:	<input type="checkbox"/> Life Lines	<input type="checkbox"/> Proper Training / Qualifications	<input type="checkbox"/> Floor Openings
<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Man Basket	<input type="checkbox"/> Proper Equipment Available	<input type="checkbox"/> Air Depletion
<input type="checkbox"/> Heat Protection Suit / Clothing	<input type="checkbox"/> Railings / Barriers	<input type="checkbox"/> Equipment Inspected / Approved	<input type="checkbox"/> Falling Debris
<input type="checkbox"/> Safety Vest	<input type="checkbox"/> Hole Covers	<input type="checkbox"/> Chain Fall / Come Along Capacity	<input type="checkbox"/> Lead
<input type="checkbox"/> Other	<input type="checkbox"/> Other	<input type="checkbox"/> Softeners Used	<input type="checkbox"/> Flammable
<u>Tools</u>	<u>Scaffolding / Ladders</u>	<input type="checkbox"/> Tag Lines Used	<input type="checkbox"/> Burns - Skin
<input type="checkbox"/> Tools Inspection / Approved	<input type="checkbox"/> Inspection / Tags are Current	<input type="checkbox"/> Correct Type of Rigging Used	<input type="checkbox"/> Burns - Eye
<input type="checkbox"/> Proper Tools are Available	<input type="checkbox"/> Proper Type Available	<input type="checkbox"/> Electrical Contact Hazards	<input type="checkbox"/> Shock
<input type="checkbox"/> Tools are in Good Condition	<input type="checkbox"/> Damage / Defects	<input type="checkbox"/> Beam / Monorail Capacity	<input type="checkbox"/> Access - Egress
<input type="checkbox"/> Training / Qualification Needed	<input type="checkbox"/> Ladders Tied Off	<input type="checkbox"/> Proper Signs / Barricades	<input type="checkbox"/> Overhead Work
<input type="checkbox"/> Other	<input type="checkbox"/> Electrical Contacts Hazards	<input type="checkbox"/> Communication Procedures	<input type="checkbox"/> Slip / Trip
<u>Fire Protection</u>	<input type="checkbox"/> Access	<input type="checkbox"/> Fall Protection Procedures	<input type="checkbox"/> Pinch Points
<input type="checkbox"/> Fire Extinguishers Available	<input type="checkbox"/> Special Provisions	<input type="checkbox"/> Other	<input type="checkbox"/> Handrails
<input type="checkbox"/> Fire Watch / Monitor Needed	<input type="checkbox"/> Other	<u>Excavation</u>	<input type="checkbox"/> Heavy Objects
<input type="checkbox"/> Fire Blankets Needed	<u>Crane / Lift Equipment</u>	<input type="checkbox"/> Proper Equipment Available	<input type="checkbox"/> Proper Lighting
<input type="checkbox"/> Combustible / Flammables Identified	<input type="checkbox"/> Proper Training / Qualifications	<input type="checkbox"/> Proper Training / Qualifications	<input type="checkbox"/> Moving Equipment
<input type="checkbox"/> Other	<input type="checkbox"/> Proper Equipment Available	<input type="checkbox"/> Shoring Required	<input type="checkbox"/> X-Ray Radiation
<u>Emergency Equipment and Planning</u>	<input type="checkbox"/> Equipment Inspected / Approved	<input type="checkbox"/> Proper Signs / Barricades	<input type="checkbox"/> Other
<input type="checkbox"/> Evacuation Route Planned	<input type="checkbox"/> Damage / Malfunctions	<input type="checkbox"/> Proper Access Egress	
<input type="checkbox"/> Reporting Area Designated	<input type="checkbox"/> Proper Maintenance Performed	<input type="checkbox"/> Inspected by Competent Person	

<input type="checkbox"/> Safety Shower Location	<input type="checkbox"/> Surface Integrity Verified	<input type="checkbox"/> Trench Excavation Form Used	
<input type="checkbox"/> Eye Wash Location	<input type="checkbox"/> Outrigger Placement	<input type="checkbox"/> Other	
<input type="checkbox"/> First Aid Kit	<input type="checkbox"/> Personnel Lift Platform	<u>Confined Space</u>	
<input type="checkbox"/> Other	<input type="checkbox"/> Critical Lift Plan Written	<input type="checkbox"/> Proper Training / Qualification	
	<input type="checkbox"/> Overhead / Radius Clearances	<input type="checkbox"/> Permit / Non-Permit Space	
	<input type="checkbox"/> Electrical Contacts Hazards	<input type="checkbox"/> Permit Procedures / Forms	
	<input type="checkbox"/> Proper Signs / Barricades	<input type="checkbox"/> Air Monitoring / Sampling	
	<input type="checkbox"/> Communications Procedures	<input type="checkbox"/> Proper PPE Requirements	
	<input type="checkbox"/> Lift / Load Charts Verified	<input type="checkbox"/> Communications Procedures	
	<input type="checkbox"/> Tag Lines Used	<input type="checkbox"/> Proper Signs / Barricades / Tags	
	<input type="checkbox"/> Load Securement	<input type="checkbox"/> Hole Watch / Attendant	
	<input type="checkbox"/> Other	<input type="checkbox"/> Other	

Log Detail Report

Entry ID:	258020	Location:	Mid West
Log:	WAP/Welding Routine	Created By/Date:	Ryan W Laney - 4/7/2022 7:54 AM
Crew:	N/A	Mod By/Date:	Christopher Bowyer - 4/11/2022 1:08 PM
Shift:	Day Shift	Completed By/Date:	Christopher Bowyer - 4/11/2022 12:57 PM
Log Date:	4/7/2022 7:50 AM		

Comments: Nathaniel Botts 513-203-3119 starting for the day
 System setting for doing the Job
 Front and rose set for 27
 Eastern IP 24
 Robertson 25
 Erie IP 27
 Norwood N 91
 Norwood H 26
 Eastern PCV13 80
 (This was cause TGT to flow more, watch Mason 1 Flow, if it get over 3500DTh notify Andy, ask him if we should flow East on line W to reduce Mason1 flow rate)(If Mason 2 is in service this is not an issue)

WAP/Welding Routine

Work Authorizati on Permit Number	163-3-29-2022	Contact person for WAP/Weldi ng Routine	Nathaniel Botts	Phone Number of Contact	513-203-3119	Location of Pressure Point for WAP	Eastern Street IP, Robertson Rd, Hyde Park
Pressure Given to Field Person	26, 26, 26	Welding on Transmissi on?	No				

Attachment	Type	Created By	Create Date
163 - 3-29-2022 - Botts, Nathaniel.pdf	File	Ryan W Laney	4/7/2022 7:54 AM

Appended Comments

Nathaniel shutting Eastern IP system off from the rest of the IP system. they will monitor and call back. (Ryan W Laney, 4/7/2022 8:06 AM)

Nathaniel blowing down the IP system at Eastern GP (Ryan W Laney, 4/7/2022 9:01 AM)

Flowtube and Street IP low pressure alarm are due to them blowing down that section of pipe (Ryan W Laney, 4/7/2022 9:11 AM)

Line N pressure went into high alarm #99. called Nathaniel and he will look into it, i said it could be PR-13 seeping threw. Line N pressure is now 100# (Ryan W Laney, 4/7/2022 10:04 AM)

pressure alarm cleared. the highest line n transmitter showed was 101.5 (Ryan W Laney, 4/7/2022 10:15 AM)

Nathaniel Botts said the pressure got up to 99# on their end. (Ryan W Laney, 4/7/2022 11:00 AM)

WAP was stopped due to pressure increasing. new idea is to close valves 270, 272, 273 and 275. these are the inlet and outlet valves for PCV13 and PCV14 (Ryan W Laney, 4/7/2022 11:48 AM)

blind flange in line D inside the plant has been installed. (Ryan W Laney, 4/7/2022 4:15 PM)

IP pressure alarms have cleared. they are putting IP system back to normal (Ryan W Laney, 4/7/2022 4:35 PM)

Nathaniel has system back to normal. he is done working WAP for the day, plans are to start it back up Monday (Ryan W Laney, 4/7/2022 5:09 PM)

Nathaniel is starting for the day. Pressures set to setpoints listed above (Christopher Bowyer, 4/11/2022 6:25 AM)

Step 11 isolating Line N at Eastern and blowing down. Inhibiting Pressure transmitter OH00081_CP_PA_PR_MTR_2. (Jerry K Morgan, 4/11/2022 8:29 AM)

Permit complete. (Christopher Bowyer, 4/11/2022 1:08 PM)



Duke Energy NGBU Ohio/Ky
2801 Riverside Drive
Cincinnati, OH 45226

April 22, 2022

To: Tim Hill, VP CCP Ops & Maintenance

From: Adam Long, NGBU VP Pipeline Operations

Re: East Works and Dicks Creek Site – Transfer of responsibility from NGBU to CCP Plant Demo and Retirement

The NGBU East Works facility is located near East End neighborhood within city limits of Cincinnati, OH. The facility was retired from service April 15, 2022. The cavern and propane assets were air gapped from Natural Gas systems effective on retirement date. The East Works facility was a Supplemental Gas – Liquid Propane storage and processing plant that supported the Natural Gas distribution system during periods of peak demand. The site includes an ~8-million-gallon underground storage cavern. With the completion of various Natural Gas system project improvements since the East Works facility commenced operations, there is no longer a need for supplemental liquid propane facilities on Duke's Natural Gas System.

The Dicks Creek facility propane operations were ceased and isolated from Natural Gas system in 2012. Dicks Creek facility is located in Monroe, OH approximately 25 miles northeast of Cincinnati, OH

Given the retirement of these facilities and with approved projects to decommission and demolish, please accept the transfer of responsibility of East Works and Dicks Creek propane facilities to CCP organization - effective on April 15, 2022. Proceed to take any necessary actions to comply with regulatory and contractual requirements associated with the sites.

If you have questions regarding this transfer, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Adam Long". The signature is fluid and cursive.

Adam Long

Cc: Brian Weisker, Tim Hill, Jessica Bednarcik, Tim Thiemann, Mike Wertz, Sarah Lawler, Amy Spiller

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

5/4/2023 3:18:17 PM

in

**Case No(s). 22-0507-GA-AIR, 22-0508-GA-ALT, 22-0509-GA-ATA, 22-0510-GA-
AAM**

Summary: Testimony Supplemental Testimony of Brian R. Weisker on Behalf of Duke Energy Ohio, Inc. In Support of Settlement electronically filed by Mrs. Tammy M. Meyer on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco and Kingery, Jeanne and Akhbari, Elyse Hanson and Vaysman, Larisa and Brama, Elizabeth and Verhalen, Kodi J..