

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke)
Energy Ohio, Inc., for an Adjustment to) Case No. 18-283-GA-RDR
Rider MGP Rates.)

In the Matter of the Application of Duke)
Energy Ohio, Inc., for Tariff Approval.) Case No. 18-284-GA-ATA

DIRECT TESTIMONY OF

TODD L. BACHAND

ON BEHALF OF

DUKE ENERGY OHIO, INC.

March 28, 2018

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. BACKGROUND AND HISTORY OF MGP SITES.....	7
III. REMEDIATION AT EAST END AND WEST END MGP SITES	8
IV. CONCLUSION.....	15

I. INTRODUCTION AND PURPOSE

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

2 A. My name is Todd L. Bachand, and my business address is 139 East Fourth Street,
3 Cincinnati, Ohio 45202.

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

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as a Lead
6 Environmental Specialist for the Remediation Group, which is part of
7 Environmental Services at Duke Energy Corporation (Duke Energy). DEBS
8 provides various administrative and other services to Duke Energy Ohio, Inc.,
9 (Duke Energy Ohio or Company) and other affiliated companies of Duke Energy.

10 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
11 **PROFESSIONAL EXPERIENCE.**

12 A. I received my Bachelor of Science degree in Environmental Sciences from
13 Springfield College, located in Springfield, Massachusetts, in 1985. From 1985 to
14 1992, as an Environmental Scientist with Baystate Environmental Consultants, Inc.
15 (East Longmeadow, MA), I was responsible for conducting site assessments,
16 performing feasibility studies, and managing construction, dredging and remediation
17 projects. From 1992 to 1996, as the manager of Technical Services for Nuclear
18 Energy Services, Inc. (Danbury, CT), I was responsible for overseeing and
19 managing a wide variety of site assessments and remediation projects. I was
20 responsible for managing a team of environmental scientists and geologists primarily
21 working on sites throughout the East Coast focusing on petroleum-impacted
22 properties. From 1996 to 1998, as the Mid-West Operations Manager for Nuclear

1 Energy Services, Inc., Integrated Environmental Services Division (Blue Ash, OH),
2 I was responsible for managing a team of environmental scientists, geologists, and
3 engineers. I was responsible for managing projects that dealt with environmental
4 assessments, real estate due diligence (Phase I Environmental Site Assessments),
5 risk assessments, underground storage tank remedial actions, and remedial actions
6 relating to chlorinated solvents, mercury, and polychlorinated biphenyls (PCBs).

7 From 1998 to 2009, as the Vice President of NEES, LLC (West Chester,
8 OH), I managed a team of environmental professionals and I was responsible for
9 projects focusing on site assessments, property transactions, remediation projects,
10 U.S. Army Corps of Engineers permitting and compliance, and cultural resources
11 assessments. Projects that I personally managed focused on site assessments (Phase
12 I, Phase II, and Phase III), remediation, risk analysis, environmental permitting,
13 environmental auditing, and environmental compliance.

14 From 2009 to 2013, as the Director of Environment, FirstGroup America
15 (Cincinnati, OH), I had all environmental responsibility for the company, which
16 included the operating companies of Greyhound Bus, Greyhound Canada,
17 Americanos, First Student, First Canada, First Transit, and First Vehicle Services.
18 The occupational footprint included Mexico, Puerto Rico, the United States and
19 Canada. My responsibilities focused on ensuring compliance with all regulatory
20 programs from city, county, state, and federal agencies in the United States and
21 city, provincial, and the Ministry of Environment in Canada. Compliance
22 included over 3,000 storage tanks and issuance of annual permits for each
23 location (1,500+ locations). Additional responsibilities focused on real estate

1 holdings throughout North America and the due diligence aspect of acquisitions
2 and dispositions for both leased and owned properties. I was also responsible for
3 managing multiple Comprehensive Environmental Response, Compensation, and
4 Liability Act sites where the company had liabilities, as well as managing
5 multiple environmental remediation projects, focusing on petroleum, chlorinated
6 solvents and PCB impacts to both soils and groundwater. In addition, I was
7 responsible for ensuring that all operating permits were up-to-date and that all
8 federal, state and local Emergency Planning and Community Right-to-Know Tier
9 II reports were filed as required.

10 From June 2014 to the present, I have been a Lead Environmental
11 Specialist with Duke Energy in the Remediation Group. I am responsible for
12 managing remediation projects within the states of Ohio, Kentucky, and Indiana.
13 I have extensive experience in site assessments and remediation that I employ
14 while managing the various projects in these states. Currently, I am managing the
15 site assessment and remediation of both former manufactured gas plant (MGP)
16 sites in Cincinnati, Ohio (the East End and West End sites) for Duke Energy
17 Ohio. I also represent Duke Energy on the Indiana Energy Association – MGP
18 Remediation Work Group and I am a member of the MGP Consortium, which is a
19 group comprised of 28 utilities where lessons learned and best practices are
20 shared among utility project managers on the investigation and cleanup of former
21 MGP sites.

1 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS A LEAD**
2 **ENVIRONMENTAL SPECIALIST WITHIN THE REMEDIATION**
3 **GROUP.**

4 **A.** As the Lead Environmental Specialist in the Remediation Group, I provide project
5 management and technical oversight for Duke Energy's environmental liabilities
6 at power plants and other properties that any Duke Energy entity or predecessor
7 company either owned operated, and/or sent material to and that is now subject to
8 remediation obligations.

9 My job responsibilities, which are similar to the responsibilities of other
10 project managers in the Remediation Group, include interaction and coordination
11 with many different groups within and outside of Duke Energy, including: senior
12 leadership; legal; finance; business units such as gas operations and transmission,
13 power delivery, and generation; ratepayers and community groups; local, state,
14 and federal governmental or regulatory officials; and consultants, contractors, and
15 site/construction workers. We prepare bid documents that detail Duke Energy's
16 requirements and expectations for remedial work and we provide the technical
17 evaluation of the proposals received. During the execution of site work, we
18 actively review, comment on, and approve all plans, scope or design changes, and
19 final documents prepared by environmental consultants. We regularly visit sites
20 during active investigation and remediation activities in order to oversee work and
21 ensure that Duke Energy's expectations are being met.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**
2 **UTILITIES COMMISSION OF OHIO?**

3 A. I have not provided oral testimony before the Public Utilities Commission of Ohio
4 (Commission). However, I have submitted written testimony in Case Nos. 14-
5 0375-GA-RDR, *et al.*; Case Nos. 15-0452-GA-RDR, *et al.*; Case Nos. 16-0542-
6 GA-RDR, *et al.*; and Case Nos. 17-0596-GA-RDR, *et al.*

7 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THESE**
8 **PROCEEDINGS?**

9 A. I am the project manager for the MGP investigation and remediation projects at
10 the East End and West End sites in Duke Energy Ohio's service territory. The
11 purpose of my testimony is to describe the environmental remediation activities
12 that occurred at the East End and West End site locations in Cincinnati, Ohio, in
13 calendar year 2017. In so doing, my testimony will support the recovery of such
14 expenditures that are included in Duke Energy Ohio's requested update to Rider
15 MGP, as authorized by the Commission.

16 **Q. DID DUKE ENERGY OHIO CONDUCT REMEDIATION ACTIVITIES IN**
17 **2017 AT THE TWO FORMER MGP SITES IDENTIFIED IN ITS**
18 **NATURAL GAS RATE CASE, CASE NOS. 12-1685, ET AL. (NATURAL**
19 **GAS RATE CASE)?**

20 A. Yes, the Company conducted remediation activities in 2017 at the two former
21 MGP sites that were identified in the Natural Gas Rate Case and related
22 testimony. Remediation activities are ongoing at these sites, as described later in
23 my testimony.

1 **Q. PLEASE DESCRIBE THE CORPORATE STRUCTURE AND**
2 **MANAGEMENT OVERSIGHT OF THESE TWO SITES.**

3 A. The remediation projects at these two sites are managed by Duke Energy
4 Environmental Services as part of the Environmental Health and Safety
5 Department in Regulated Utilities. Environmental Services is headed by a Vice
6 President who oversees Directors who are appointed to manage various
7 disciplines/media programs. Within the Remediation Group, I review project
8 scopes and activities with each consultant's individual project manager on a
9 minimum bi-weekly basis, which I then review with my management on a
10 minimum bi-weekly basis. Information on the status and activities on the East
11 End and West End sites is periodically reviewed with higher levels of
12 management and the financial department. Known and anticipated activities,
13 including cost estimates, are reviewed with levels of senior management at least
14 semi-annually and whenever significant decisions are required on strategy or
15 anticipated costs. Each level of management has limited authority to approve
16 activities and authorize the expenditure of funds. For new purchase orders,
17 approval also must be obtained from Duke Energy's sourcing department. Over
18 the course of the year, I meet with a number of members of Duke Energy
19 management to discuss the status of the projects, seek input on certain decisions,
20 and obtain approval of spending requests, as necessary.

II. BACKGROUND AND HISTORY OF MGP SITES

1 **Q. THE RECORD IN THE NATURAL GAS RATE CASE DETAILS THE**
2 **HISTORY OF MANUFACTURED GAS, AS WELL AS THE TYPICAL**
3 **INVESTIGATION AND REMEDIATION OF FORMER MGP SITES. IS**
4 **THERE ADDITIONAL INFORMATION TO SUPPLEMENT THAT**
5 **PRIOR DETAIL?**

6 **A.** No. Information on the background of manufactured gas and its history in
7 southwest Ohio is described at length in the Commission's Opinion and Order in
8 the Natural Gas Rate Case (Commission's Order). Likewise, the Commission's
9 Order provides details of typical investigation and remediation activities and a
10 description of the impact of Ohio laws and regulations and the Ohio
11 Environmental Protection Agency (Ohio EPA) clean-up programs on the
12 management of the environmental conditions at Duke Energy Ohio's MGP sites,
13 especially Ohio EPA's Voluntary Action Program (VAP). This previous
14 testimony remains accurate today and, as such, I will instead focus my testimony
15 on activities occurring during the period relevant to these proceedings calendar
16 year 2017.

17 **Q. PLEASE DESCRIBE THE ONGOING WORK AT EAST END AND WEST**
18 **END.**

19 All of the environmental work at the East End and West End sites continues to be
20 performed by environmental consulting firms experienced in MGP site
21 remediation and under the oversight of Ohio EPA VAP Certified Professionals
22 (CPs), whose role is to ensure activities are compliant with Ohio EPA's VAP

1 regulations. The Ohio EPA VAP CPs and environmental consultants hired to
2 perform activities at the two sites continue to work with me to ensure that the
3 work complies with the VAP and meets all applicable local, state, and federal
4 standards, as well as to ensure that the environmental conditions at the sites are
5 protective of human health and the environment, both short term and long term.

III. REMEDATION AT EAST END AND WEST END MGP SITES

6 **Q. PLEASE DESCRIBE THE COMPANY'S GENERAL USE OF THE EAST**
7 **END AND WEST END MGP SITES IN 2017.**

8 A. Both the East End and West End facilities continued to be used as plant in service
9 for utility service by Duke Energy Ohio. At East End, the facility continues to be
10 used as a synthetic natural gas peaking station.

11 At West End, in 2017, Duke Energy's Transmission and Distribution
12 Group continues to work on replacing and relocating equipment and infrastructure
13 that will be impacted by the proposed new BSB corridor project. The Company
14 continues to own and operate two 12-inch diameter gas transmission pipelines
15 that enter Ohio at the West End site. At the valve pit on the riverbank, the two
16 lines combine into one 20-inch pipeline. There is also a gas measurement station
17 at this location. This building also houses the Remote Terminal Units (RTU)
18 equipment, which is part of the Supervisory Control and Data Acquisition
19 (SCADA) system that monitors and controls the natural gas distribution system.
20 This line supplies approximately 20,000 customers in a peak hour.

1 **Q. PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2017 THAT**
2 **RELATE TO THE REMEDIATION OF ENVIRONMENTAL**
3 **CONDITIONS RESULTING FROM THE FORMER EAST END MGP.**

4 A. All upland work at the East End site performed in 2017 was conducted under the
5 oversight of an Ohio EPA VAP CP, employed by the firm of Haley & Aldrich,
6 Inc. (Haley & Aldrich). As noted in the Commission's Order, the East End site
7 was initially divided into three smaller identified areas for environmental
8 investigation and remediation purposes only that are referred to, for purposes of
9 the VAP, as the "East Parcel," "Middle Parcel," and "West Parcel."

10 In 2017, Haley & Aldrich's work included completing *in-situ*
11 solidification activities within the Phase 2 Area (Area West of the West Parcel),
12 backfilling and restoring the Phase 2 Area, and commencing remedial activities in
13 the Phase 3 Area (part of the Middle Parcel), which included excavation and *in-*
14 *situ* solidification.

15 Duke Energy Ohio engaged Anchor QEA, LLC (Anchor QEA) to
16 investigate whether there are any impacts to the Ohio River from the former MGP
17 operations and if so, the nature and extent of any impacts. This work is being
18 performed in consultation with Haley & Aldrich's Ohio EPA VAP CP to ensure
19 that the activities are compliant with Ohio EPA's VAP regulations and is
20 consistent with the work that has been performed in the uplands. In 2017, Anchor
21 QEA's work included preparing the Phase II Property Assessment work plan,
22 obtaining all necessary permits and authorizations for the investigation (including
23 conducting a mussel survey), and commencing collection of samples from the

1 river bank.

2 During the remedial activities, precautions were taken to ensure that the
3 critical infrastructure at the site was not damaged; Duke Energy contracted with
4 Terracon Consultants, Inc. to conduct vibration monitoring of the critical
5 infrastructure during the remediation activities.

6 Ambient air monitoring activities continue to be conducted by AECOM to
7 monitor the perimeter ambient air quality during remedial activities.

8 In addition, Haley & Aldrich conducted quarterly groundwater sampling
9 on all four parcels that contained groundwater wells.

10 **Q. PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2017 THAT**
11 **RELATE TO THE REMEDIATION OF ENVIRONMENTAL**
12 **CONDITIONS RESULTING FROM THE FORMER WEST END MGP**
13 **SITE.**

14 **A.** The work performed in 2017 included an Ohio VAP Phase II Property
15 Assessment and a Remedial Alternatives Analysis of the Phase 3 Area and the
16 Tower Area, which were performed under the oversight of an Ohio EPA VAP CP
17 employed by CH2M Hill (CH2M).

18 Groundwater sampling at the West End MGP site was performed under
19 the oversight of an Ohio EPA VAP CP employed by CH2M.

20 In addition, Duke Energy developed a Request for Proposals for the
21 design/build services for the remedial actions to be initiated in the Phase 3 Area
22 and the Tower Area and solicited bids from three firms in December of 2017.
23 Based upon a review of the proposals, Arcadis was awarded the contract in early

1 2018.

2 Also, Duke Energy developed a Request for Proposals for the Ohio VAP
3 Phase II Property Assessment of the area west of the existing substation
4 infrastructure (Phase 4 Area) and solicited bids from five firms in November of
5 2017. Based upon a review of the proposals, AECOM was awarded the contract
6 in December 2017.

7 Duke Energy Ohio engaged Anchor QEA to investigate whether there are
8 any impacts to the Ohio River from the former MGP operations, and if so, the
9 nature and extent of any such impacts, as well as other evaluations of the
10 conditions in connection with the investigation and remediation of the West End
11 Site. This work is being performed in consultation with Haley & Aldrich's Ohio
12 EPA VAP CP to ensure that the activities are compliant with Ohio EPA's VAP
13 regulations and is consistent with the work that has been performed in the
14 uplands. In 2017, Anchor QEA's work included preparing the Phase II Property
15 Assessment work plan, obtaining all necessary permits and authorizations for the
16 investigation, collecting samples from the river bank, collecting sediment samples
17 from the Ohio River for laboratory analysis, and evaluation and analysis of the
18 groundwater and geologic data at the site.

19 **Q. PLEASE DETAIL THE 2017 COSTS INCURRED AT BOTH THE EAST**
20 **END AND WEST END SITES FOR WHICH DUKE ENERGY IS**
21 **SEEKING RECOVERY THROUGH RIDER MGP.**

22 **A.** In 2017, Duke Energy Ohio incurred \$14,651,798 in MGP costs at the East End
23 and West End sites. The recovery mechanism for the costs incurred in 2017 is

1 discussed in the Direct Testimony of Duke Energy Ohio witness Sarah E. Lawler.
2 The categories of costs that are described at length in the Commission's Order are
3 applicable to the remediation activities that occurred in 2017. External costs
4 included: environmental consultants used for the investigation of the soil,
5 groundwater and sediment impacts; environmental consultants used to perform
6 oversight during remedial actions; and analytical laboratories that analyzed soil
7 and groundwater samples.

8 Internal costs included: expenses for Duke Energy employees working on
9 the project; oversight by the Duke Analytical Laboratory located in Huntersville,
10 North Carolina that performed audits of the analytical laboratories and performed
11 quality control and review of analytical data; oversight and coordination by Duke
12 Energy Power Delivery and Gas Operations personnel while working in close
13 proximity to sensitive electrical and/or gas utilities; survey support; and project
14 management oversight.

15 **Q. PLEASE DESCRIBE THE GENERAL PROCESS USED TO ENSURE THE**
16 **REASONABLENESS OF COSTS INCURRED TO REMEDIATE THE**
17 **EAST END AND WEST END SITES.**

18 **A.** As detailed in the Commission's Order, Duke Energy Ohio employs a number of
19 procedures to ensure that the scope of investigation and cleanup work is
20 appropriate and that the cost to perform that work is reasonable and prudent. Duke
21 Energy project managers work closely with Ohio EPA VAP CPs and experienced
22 environmental consultants to evaluate different options based on various criteria,
23 including compliance with environmental regulations, protection of human health

1 and the environment, best practices, feasibility, constructability, safety, prior
2 experience, and cost. These considerations are built into the solicitation of bids
3 and estimates through Duke Energy's "Request for Proposals" process. Bids are
4 screened first on their technical merit, and then evaluated for cost. Scope
5 modifications in the field due to new or changing field conditions must be
6 approved by Duke Energy project managers and may also require approval from
7 Duke Energy management and/or Duke Energy's finance department depending
8 on the extent of the modification and other circumstances.

9 **Q. BASED ON YOUR EXPERIENCE, DID DUKE ENERGY OHIO**
10 **REASONABLY AND PRUDENTLY INCUR \$14,651,798 IN COSTS IN**
11 **2017?**

12 **A.** Yes. The activities that occurred at the East End and West End MGP properties
13 related to the remediation of MGP impacts were conducted following the
14 procedures described in 2012 written testimony and 2013 oral testimony in the
15 Duke Energy Ohio Natural Gas Distribution Rate Case by Duke Energy Ohio
16 witness Jessica Bednarcik, activities that were deemed to be reasonable and
17 prudent by the Commission in its Order. Based on my experience with
18 remediating contaminated sites, including MGP sites like East End and West End,
19 the \$14,651,798 represents reasonable and prudent costs for the work that was
20 performed in 2017.

21 **Q. PLEASE DISCUSS THE TIMING AND PLANNING RELATED TO THE**
22 **WORK THAT WAS PERFORMED IN 2017 PLANNED TO BE**
23 **PERFORMED AT THE EAST END AND WEST END SITES.**

1 A. These types of environmental projects are iterative in nature and Duke Energy
2 Ohio has phased the remediation in order to avoid needless expense and in a
3 manner that protects the safety of Duke Energy Ohio's employees and the
4 community and avoids potential disruptions to natural gas and electric services.
5 As is typical for these types of cleanups, as the upland areas where the former
6 MGP processes were located have been evaluated and remediated, Duke Energy
7 Ohio has begun to evaluate potential off-site impacts, including in the Ohio River,
8 to determine whether off-site investigation and/or additional remediation will be
9 required. As remediation of the uplands soils is being completed, Duke Energy
10 Ohio will continue to shift its focus to evaluate groundwater, river sediment, and
11 other off-site impacts.

12 The East End Gas Works is a high-risk gas facility with sensitive
13 underground infrastructure. As such, extra security and safety precautions must be
14 taken when remediating this site to ensure the safety of Duke Energy Ohio's
15 employees as well as the surrounding community. Planned future work includes
16 completing remediation of the Middle Parcel, completing investigation of the
17 Ohio River bank and sediments, and implementation of semi-annual groundwater
18 monitoring program.

19 At the West End site, planned future work will involve designing and
20 implementing the remedial actions to be initiated in the (Phase 3 Area), which is
21 immediately to the west of the existing Brent Spence Bridge right-of-way, and the
22 Tower Area. Duke Energy selected Arcadis to perform this work, which will be
23 conducted under the oversight of Arcadis's Ohio EPA VAP CP. In addition, Duke

1 Energy has selected AECOM to conduct an Ohio VAP Phase II Property
2 Assessment in an area on the western portion of the West End Site (Phase 4
3 Area). Planned future work includes preparation of the Ohio VAP Phase II
4 Property Assessment Report and implementation of the groundwater monitoring
5 program. In addition, the Company will continue to monitor the site groundwater
6 on a quarterly basis.

7 **Q. PLEASE EXPLAIN WHAT DUKE ENERGY OHIO IS DOING TO**
8 **PURSUE OTHER MEANS OF FUNDING THE REMEDIATION AT EAST**
9 **END AND WEST END.**

10 A. Duke Energy Ohio witness Keith Bone will explain activities related to the
11 Company's efforts to seek insurance coverage for the costs incurred in
12 remediating the two MGP sites, consistent with the Commission's Order.

13 Additionally, Duke Energy Ohio continues to investigate and pursue other
14 potentially responsible parties that may be liable to contribute to the costs of
15 investigating and remediating the East End and West End sites. Duke Energy
16 Ohio continued its evaluation of the nature and extent of potential liability of
17 NiSource, Inc. (NiSource) an alleged successor to Columbia Gas & Electric,
18 related to the historic MGP operations at the two sites. Duke Energy Ohio and
19 NiSource and TransCanada Corporation (which purchased Columbia Pipeline
20 Group in 2016) have continued to engage in discussions in 2017.

IV. CONCLUSION

21 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22 A. Yes.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/28/2018 2:41:48 PM

in

Case No(s). 18-0283-GA-RDR, 18-0284-GA-ATA

Summary: Testimony Direct Testimony of Todd L. Bachand electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H