DUKE ENERGY OHIO EXHIBIT_____

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.	)))	Case No. 19-174-GA-RDR
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	))	Case No. 19-175-GA-ATA

DIRECT TESTIMONY OF

TODD L. BACHAND

ON BEHALF OF

DUKE ENERGY OHIO, INC.

March 29, 2019

TABLE OF CONTENTS

ATTACHMENT:

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

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

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

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

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

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

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

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

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

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

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS A LEAD ENVIRONMENTAL SPECIALIST WITHIN THE REMEDIATION GROUP.

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

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

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

A. I have not provided oral testimony before the Public Utilities Commission of Ohio (Commission). However, I have submitted written testimony in Case Nos. 14-0375-GA-RDR, *et al.*; Case Nos. 15-0452-GA-RDR, *et al.*; Case Nos. 16-0542-GA-RDR, *et al.*; Case Nos. 17-0596-GA-RDR, *et al.*; and Case Nos. 18-283-GA-RDR, *et al.*

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

A. I am the project manager for the MGP investigation and remediation projects at and around the East End and West End sites in Duke Energy Ohio's service territory. The purpose of my testimony is to describe the environmental remediation activities that occurred at the East End and West End site locations in Cincinnati, Ohio, in calendar year 2018. In so doing, my testimony will support the recovery of such expenditures that are included in Duke Energy Ohio's requested update to Rider MGP, as authorized by the Commission.

Q. PLEASE EXPLAIN WHAT YOU MEAN BY THE TERM MGP SITES.

A. For background, Duke Energy Ohio owns and utilizes for utility operations two facilities in Hamilton County Ohio, near downtown Cincinnati, that previously were utilized for MGP operations. These two locations are known as the East End site and the West End site. The East End site was subdivided into different areas for prioritization of remediation under the VAP, referred to a "parcels." The presence of the aforementioned legacy MGP operations in these locations has

necessitated environmental remediation stemming from those operations long ago. The term MGP sites thus refers to the East End site and the West End site where MGP equipment and operations were formerly conducted that resulted in by-products and waste materials causing contamination at and around the facilities that now must be remediated under applicable environmental laws. As the Company explained in its 2012 natural gas rate case, these by-products and other waste materials include tar-like material (TLM) and oil-like material (OLM) that contains a number of chemicals including benzene and polyaromatic hydrocarbons, which are mobile and can dissolve into the groundwater at concentrations above applicable standards.[1] These contaminants are not stable, but rather are mobile and migrate through soils and groundwater over time.[2] At both Duke Energy Ohio MGP sites, a major surface water body (Ohio River) is located adjacent to the sites and the mobile free product could migrate into the surface water body.[3] Investigation and remediation of these materials is required to meet applicable standards under the Ohio Environmental Protection Agency (Ohio EPA) Voluntary Action Program (VAP) Therefore, the term MGP sites refers to the areas where MGP contaminants are present and must be remediated under CERCLA and in accordance with the Ohio VAP in order to address Duke Energy Ohio's liability for those conditions.

[1] *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No.12-1865-GA-AIR, *et al.*, Direct Testimony of Shawn S. Fiore at 18 (April 22, 2013).
[2] Id.
[3] Id.

Q. DID DUKE ENERGY OHIO CONDUCT REMEDIATION ACTIVITIES IN 2018 AT THE TWO FORMER MGP SITES IDENTIFIED IN ITS NATURAL GAS RATE CASE, CASE NOS. 12-1685, *ET AL.* (NATURAL GAS RATE CASE)?

A. Yes, the Company conducted remediation activities in 2018 at the two former MGP sites that were identified in the Natural Gas Rate Case and related testimony. Remediation activities are ongoing at these sites, as described later in my testimony.

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

A. The remediation projects at these two sites are managed by Duke Energy Environmental Services as part of the Environmental Health and Safety Department in Regulated Utilities. Environmental Services is headed by a Vice President who oversees Directors who are appointed to manage various disciplines/media programs. Within the Remediation Group, I review project scopes and activities with each consultant's individual project manager on a minimum bi-weekly basis, which I then review with my management on a minimum bi-weekly basis. Information on the status and activities on the East End and West End sites is periodically reviewed with higher levels of management and the financial department. Known and anticipated activities, including cost estimates, are reviewed with levels of senior management at least semi-annually and whenever significant decisions are required on strategy or anticipated costs. Each level of management has limited authority to approve activities and authorize the expenditure of funds. For new purchase orders, approval also must be obtained

from Duke Energy's sourcing department. Over the course of the year, I meet with a number of members of Duke Energy management to discuss the status of the projects, seek input on certain decisions, and obtain approval of spending requests, as necessary.

II. BACKGROUND AND HISTORY OF MGP SITES

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

A. No. Information on the background of manufactured gas and its history in southwest Ohio is described at length in the Company's Application, supporting testimony, and the Commission's Opinion and Order in the Natural Gas Rate Case (Commission's Order).[4] Likewise, the Commission's Order provides details of typical investigation and remediation activities and a description of the impact of Ohio laws and regulations and the Ohio EPA clean-up programs on the management of the environmental conditions at Duke Energy Ohio's MGP sites, especially the VAP. This previous testimony remains accurate today and, as such, I will instead focus my testimony on activities occurring during the period relevant to these proceedings calendar year 2018.

[4] *See e.g., In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No.12-1865-GA-AIR, *et al.*, Supplemental Direct Testimony of Jessica Bednarcik, (February 23, 2013); Id., Direct Testimony of Shawn S. Fiore (April 22, 2013); and Id. Opinion and Order (November 13, 2013).

Q. PLEASE DESCRIBE THE ONGOING WORK AT THE EAST END AND WEST END SITES.

The environmental work at the East End and West End sites continues to be performed by environmental consulting firms experienced in MGP site remediation and under the oversight of Ohio EPA VAP Certified Professionals (CPs), whose role is to ensure activities are compliant with Ohio EPA's VAP regulations. The Ohio EPA VAP CPs and environmental consultants hired to perform activities at the two sites continue to work with me to ensure that the work complies with the VAP and meets all applicable local, state, and federal standards, as well as to ensure that the environmental conditions at the sites are protective of human health and the environment, both short term and long term.

III. REMEDIATION AT EAST END AND WEST END SITES

Q. PLEASE DESCRIBE THE COMPANY'S GENERAL USE OF THE EAST END AND WEST END SITES IN 2018.

A. Both the East End and West End facilities continued to be used as plant in service for utility service by Duke Energy Ohio. At the East End site, the facility continues to be used as a synthetic natural gas peaking station with significant above and underground facilities throughout the area, especially in the location referred to as the "Middle Parcel."

At the West End site, Duke Energy's Transmission and Distribution Group continues to operate the electrical substations. The Company continues to own and operate two 12-inch diameter gas transmission pipelines that enter Ohio at the West End site. At the valve pit on the riverbank, the two lines combine into one 20-inch

pipeline. There is also a gas measurement station at this location. This building also houses the Remote Terminal Units (RTU) equipment, which is part of the Supervisory Control and Data Acquisition (SCADA) system that monitors and controls the natural gas distribution system. This line supplies approximately 20,000 customers in a peak hour.

Q. PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2018 THAT RELATE TO THE REMEDIATION OF ENVIRONMENTAL CONDITIONS RESULTING FROM THE FORMER EAST END MGP.

A. All upland work at the East End site performed in 2018 was conducted under the oversight of an Ohio EPA VAP CP, employed by the firm of Haley & Aldrich, Inc. (Haley & Aldrich). As noted in the Commission's Order, the work at the East End site was initially divided into three smaller identified areas for environmental investigation and remediation purposes only that are referred to, for purposes of the VAP, as the "East Parcel," "Middle Parcel," and "West Parcel." As required by the VAP, further investigation of the extent of the MGP contamination was conducted and remediation was performed in an area referred to as the "Area West of the West Parcel" (see further testimony on this subject below).

In 2018, Haley & Aldrich's work included completing *in-situ* solidification activities within the Phase 3 Area (Middle Parcel), backfilling and restoring the Phase 3 Area; completing *in-situ* solidification activities within the Phase 6 Area (Middle Parcel), and initiated remedial activities in the Phase 4 Area (part of the Middle Parcel), which included excavation and *in-situ* solidification.

Duke Energy Ohio engaged Anchor QEA, LLC (Anchor QEA) to

investigate whether there are any impacts to the Ohio River from the former MGP operations and if so, the nature and extent of any impacts. This work is being performed in consultation with Haley & Aldrich's Ohio EPA VAP CP to ensure that the activities are compliant with Ohio EPA's VAP regulations and is consistent with the work that has been performed in the uplands. In 2018, Anchor QEA's work included the installation of borings and the collection of samples for laboratory analysis within the Ohio River. All work conducted within the Ohio River was completed within the State of Ohio and within the geographical boundaries of the historical MGP facility. Because of the construction of the Markland Dam in the 1960s, the elevation of the Ohio River today is much higher today than it was during the operation of the MGPs at the East End and West End sites decades ago. As such, the original southern boundaries of the East End and West End sites are now located more than two hundred feet further into the current Ohio River due to the higher water levels.

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

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

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

Q. PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2018 THAT RELATE TO THE REMEDIATION OF ENVIRONMENTAL CONDITIONS RESULTING FROM THE FORMER WEST END MGP SITE.

A. The work performed in 2018 included an Ohio VAP Phase II Property Assessment of the area west of the existing substation (Phase 4 Area) which was completed by AECOM.

In addition, Arcadis completed the remedial engineering design services for the Phase 3 Area and Tower Area based upon the previously completed Remedial Alternatives Analysis. This work also included the development of all necessary work plans and permit applications for the planned remedial activities. Upon completion of the remedial designs, Arcadis held a bid event for construction services and four bids were obtained and evaluated by Arcadis and Duke Energy Ohio. The evaluation concluded that Northstar should be awarded the project based upon multiple evaluation factors which include costing, means & methods, health & safety, schedule and resources.

Duke Energy Ohio engaged Anchor QEA to investigate whether there are any impacts to the Ohio River from the former MGP operations and, if so, the nature and extent of any such impacts, as well as other evaluations of the conditions in connection with the investigation and remediation of the West End site. This work is being performed in consultation with Haley & Aldrich's Ohio EPA VAP CP to ensure that the activities are compliant with Ohio EPA's VAP regulations and is consistent with the work that has been performed in the uplands. In 2018, Anchor

QEA's work included evaluation of the laboratory analysis of samples from the river bank and sediment samples from the Ohio. This work and analysis is ongoing and final results are still unknown at this time.

In addition, AECOM conducted quarterly groundwater sampling of all groundwater monitoring wells at the West End site.

Q. PLEASE DETAIL THE 2018 COSTS INCURRED AT BOTH THE EAST END AND WEST END SITES FOR WHICH DUKE ENERGY OHIO IS SEEKING RECOVERY THROUGH RIDER MGP.

A. In 2018, Duke Energy Ohio incurred $19,804,030.73 in MGP costs at the East End and West End sites. The recovery mechanism for the costs incurred in 2018 is discussed in the Direct Testimony of Duke Energy Ohio witness Sarah E. Lawler. The categories of costs that are described at length in the Commission's Order are applicable to the remediation activities that occurred in 2018. External costs included: environmental consultants used for the investigation of the soil, groundwater and sediment impacts; environmental consultants used to perform oversight during remedial actions; environmental contractors and subcontractors used to perform excavation and *in situ* stabilization; disposal costs; and analytical laboratories that analyzed soil and groundwater samples.

Internal costs included: expenses for Duke Energy employees working on the project; oversight by the Duke Energy Analytical Laboratory located in Huntersville, North Carolina that performed audits of the analytical laboratories and performed quality control and review of analytical data; oversight and coordination by Duke Energy Power Delivery and Gas Operations personnel while

working in close proximity to sensitive electrical and/or gas utilities; survey support; and project management oversight.

Although Duke Energy Ohio's responsibility is to remediate all impacts associated with the former MGP operations, in 2018, all costs incurred for both the East End and the West End sites are associated with activities conducted within the original MGP facility operational boundaries.

Q. DID DUKE ENERGY OHIO HAVE AN OBLIGATION TO REMEDIATE THE AREA WEST OF THE WEST PARCEL AS PART OF THE EAST END SITE?

A. Yes. Duke Energy Ohio completed active remediation of the Area West of the West Parcel in 2017. Although a portion of the Area West of the West Parcel was part of the 9-acre property that was acquired from DCI Properties, Inc. in 2011, much of the Area West of the West Parcel had been owned by Duke Energy Ohio and its predecessor companies since at least 1928, during which the East End site was operated as an MGP. Therefore, much of the Area West of the West Parcel was part of the original East End MGP. A figure depicting the portions of the Area West of the West Parcel that were part of the former East End MGP site is attached as TLB-1.

The "parcel" designations at the East End site were not intended to identify actual real estate parcel boundaries or facility operations, but were utilized to denote phases of remediation under the VAP. These designations were intended to help identify and reference the areas that were to be phased for purposes of investigation and remediation and were not intended to serve as real estate descriptions.

More importantly, even if the Area West of the West Parcel had not been part of the former East End MGP operations, Duke Energy Ohio would still be obligated under applicable environmental laws to investigate the extent of the contamination from the former MGP operations and to remediate, if needed, impacts from the former MGP operations. This obligation exists regardless of whether the impacts are within any specific "parcel" or geographic boundaries, as Duke Energy Ohio has liability for those impacts and must remediate them in order to address its liability under applicable environmental laws for the contamination at these sites.

Based on the investigation at the East End site as required by the VAP, it was determined that there were MGP impacts in the "Area West of the West Parcel," similar in nature to the impacts that were present in other areas of the property, including areas that were remediated and addressed prior to 2013. As such, it logically followed remedial approaches to address the impacts in the Area West of the West Parcel that have been consistent with the approach utilized throughout the East End site, which has involved, at least in part, excavation and treatment (*i.e., in situ* solidification) of contamination in source areas, where OLM and TLM were present.

Q. HAS DUKE ENERGY OHIO SOUGHT TO RECOVER COSTS ASSOCIATED WITH THE RELOCATION OF THE ELECTRIC SUBSTATION ON THE WEST END SITE TO ACCOMMODATE THE BRENT SPENCE BRIDGE?

A. No. Duke Energy Ohio has sought recovery of only MGP remediation-related costs through the annual Riders. Duke Energy Ohio has not sought to recover through the Rider any costs for the electric substation relocation project as these costs were tracked and budgeted separately.

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

A. As detailed in the Commission's Order, Duke Energy Ohio employs and has continued to employ a number of procedures to ensure that the scope of investigation and cleanup work is appropriate and that the cost to perform that work is reasonable and prudent. Duke Energy project managers work closely with Ohio EPA VAP CPs and experienced environmental consultants to evaluate different options based on various criteria, including compliance with environmental regulations, protection of human health and the environment, best practices, feasibility, constructability, safety, prior experience, and cost. These considerations are built into the solicitation of bids and estimates through Duke Energy's "Request for Proposals" process. Bids are screened first on their technical merit, and then evaluated for cost. Work that is awarded without going through all aspects of this process must be justified to and approved by Duke Energy management. Scope modifications that are made in the field due to new or changing field conditions must be approved by Duke Energy project managers and may also require approval from Duke Energy management and/or Duke Energy's finance department depending on the extent of the modification and other circumstances.

Q. BASED ON YOUR EXPERIENCE, DID DUKE ENERGY OHIO REASONABLY AND PRUDENTLY INCUR $19,804,030 IN COSTS IN 2018?

A. Yes. The activities that occurred at the East End and West End MGP properties related to the remediation of MGP impacts were conducted consistent with the procedures described in 2012 written testimony and 2013 oral testimony in the Duke Energy Ohio Natural Gas Distribution Rate Case, activities that were deemed to be reasonable and prudent by the Commission's Order. The approach and scope of the remedial activity that has been conducted at the East End and West End sites since the Commission's Order have been consistent with what was deemed to be reasonable and prudent by the Commission's Order involving excavation and *in-situ* solidification (ISS) in areas with OLM and TLM. Based on my experience with remediating contaminated sites, including MGP sites like East End and West End, the $19,804,030 represents reasonable and prudent costs for the work that was performed in 2018.

Q. PLEASE DISCUSS THE TIMING AND PLANNING RELATED TO THE WORK THAT WAS PERFORMED IN 2018 PLANNED TO BE PERFORMED AT THE EAST END AND WEST END SITES IN 2019.

A. These types of environmental projects are iterative in nature and Duke Energy Ohio has phased the remediation in a prudent fashion to avoid needless expense and in a manner that protects the safety of Duke Energy Ohio's employees and the community and avoids potential disruptions to natural gas and electric services. As is typical for these types of cleanups, the upland areas where the former MGP

processes were located are the first to be evaluated and remediated. Now Duke Energy Ohio has begun to evaluate potential impacts in the Ohio River, to determine whether impacts are present and to determine what remediation will be required, if any. In addition, Duke Energy Ohio will continue to evaluate the groundwater at both sites on a quarterly basis.

The East End Gas Works is a high-risk gas facility with sensitive underground infrastructure. As such, extra security and safety precautions must be taken when remediating this site to ensure the safety of Duke Energy Ohio's employees as well as the surrounding community. Work planned in 2019 at the East End site includes completing remediation of the currently accessible areas of the Middle Parcel, completing investigation of the Ohio River bank and sediments, and continuation of the annual groundwater monitoring program.

At the West End site, work planned in 2019 will involve implementing the remedial actions in the Phase 3 Area, which is immediately to the west of the existing Brent Spence Bridge right-of-way, and the Tower Area. Duke Energy Ohio selected Arcadis to complete the engineering design and Northstar to implement the remedial tasks. In addition, the Company will continue to monitor the site groundwater on a quarterly basis and will complete the investigation of the Ohio River bank and sediments.

Q. DOES DUKE ENERGY OHIO HAVE AN OBLIGATION TO INVESTIGATE AND REMEDIATE, IF NEEDED, THE OHIO RIVER AND THE RIVER SEDIMENTS?

A. Yes. My understanding based on my experience remediating sites and discussions

with Duke Energy Ohio's VAP CPs and the Company's legal counsel is that Duke Energy Ohio has an obligation to investigate and remediate, if needed, MGP impacts to the Ohio River. Duke Energy Ohio's liability does not simply end at a geographic border, but rather is based on where the contamination may have migrated and where people and ecologic resources may be exposed.

In addition, as I previously explained, part of the area that is currently under the Ohio River waterline was formerly part of the East End site during its operations as an MGP. The low-water mark of the Ohio River has changed significantly over time, particularly since the construction of the Markland Dam in the 1960s. The East End site extended more than two hundred feet further into the current Ohio River during the East End site's operation as an MGP. The investigation that has been conducted in the Ohio River to date is in areas that were actually part of the former East End site prior to the 1960s.

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

A. Duke Energy Ohio witnesses Keith Butler and Michael Lynch will explain activities related to the Company's efforts to seek insurance coverage for the costs incurred in remediating the two former MGP sites, consistent with the Commission's Order.

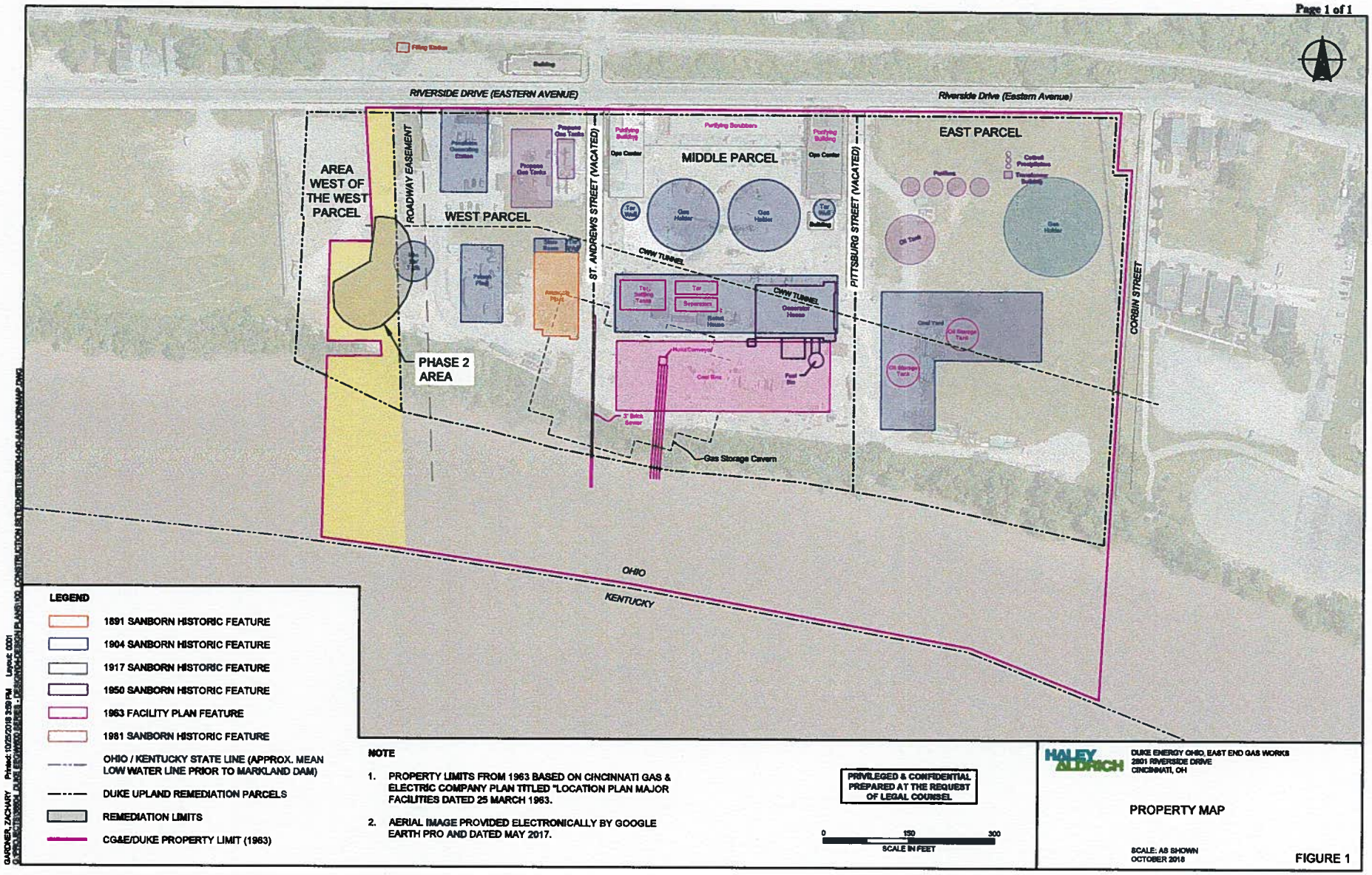
Duke Energy Ohio continued discussions with NiSource, Inc. (NiSource) and TransCanada Corporation (which purchased Columbia Pipeline in 2016) related to the historic MGP operations at the two sites. NiSource and/or

TransCanada is an alleged successor to Columbia Gas & Electric, which was the parent company to Duke Energy Ohio's predecessor companies, during a portion of the MGP operations at the East End and West End sites. The parties have not reached agreement as to Columbia Gas & Electric's responsibility and obligations at the East End and West End sites, if any. Discussions with NiSource and TransCanada are expected to continue.

IV. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.


RIVERSIDE DRIVE (EASTERN AVENUE)
Riverside Drive (Eastern Avenue)
AREA WEST OF THE WEST PARCEL
ROADWAY EASEMENT
WEST PARCEL
MIDDLE PARCEL
EAST PARCEL
ST. ANDREWS STREET (VACATED)
PITTSBURG STREET (VACATED)
CORBIN STREET
CWW TUNNEL
PHASE 2 AREA
Gas Storage Cavern
OHIO
KENTUCKY
LEGEND
1891 SANBORN HISTORIC FEATURE
1904 SANBORN HISTORIC FEATURE
1917 SANBORN HISTORIC FEATURE
1950 SANBORN HISTORIC FEATURE
1963 FACILITY PLAN FEATURE
1981 SANBORN HISTORIC FEATURE
OHIO / KENTUCKY STATE LINE (APPROX. MEAN LOW WATER LINE PRIOR TO MARKLAND DAM)
DUKE UPLAND REMEDIATION PARCELS
REMEDIATION LIMITS
CG&E/DUKE PROPERTY LIMIT (1963)
NOTE
1. PROPERTY LIMITS FROM 1963 BASED ON CINCINNATI GAS & ELECTRIC COMPANY PLAN TITLED "LOCATION PLAN MAJOR FACILITIES DATED 25 MARCH 1963.
2. AERIAL IMAGE PROVIDED ELECTRONICALLY BY GOOGLE EARTH PRO AND DATED MAY 2017.
PRIVILEGED & CONFIDENTIAL PREPARED AT THE REQUEST OF LEGAL COUNSEL
0 150 300
SCALE IN FEET
HALEY ALDRICH
DUKE ENERGY OHIO, EAST END GAS WORKS
2801 RIVERSIDE DRIVE
CINCINNATI, OH
PROPERTY MAP
SCALE: AS SHOWN
OCTOBER 2018
FIGURE 1
GARDNER, ZACHARY Printed: 10/25/2018 3:59 PM Layout: 0201

Summary: Testimony 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