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. 14-0375-GA-RDR
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.) Case No. 14-0376-GA-ATA)

DIRECT TESTIMONY OF

JESSICA L. BEDNARCIK

ON BEHALF OF

DUKE ENERGY OHIO, INC.

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I. <u>INTRODUCTION AND PURPOSE</u>

1	O.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A. My name is Jessica Lyn Bednarcik, and my business address is 526 South Church
- 3 Street, Charlotte, North Carolina 28202.

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

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

10 Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL

11 BACKGROUND AND PROFESSIONAL EXPERIENCE.

- 12 A. I received my Bachelor of Science degree in Chemical Engineering from Clemson
- University, located in Clemson, South Carolina, on May 11, 2001. From 2001-
- 14 2002, as an Associate Engineer for Duke/Fluor Daniel (Charlotte, NC), I designed
- processes for new combined cycle power generation plants, with a focus on water
- treatment. From 2003-2004, as an Associate Engineer for Southerland Associates
- 17 (Charlotte, NC), I worked on numerous design engineering projects. From 2004-
- 18 2005, as an Associate Engineer for WPC, Inc. (Charlotte, NC), my responsibilities
- included environmental compliance and design, including Phase I Environmental
- 20 Site Assessments; Underground Storage Tank Remediation projects; development
- of Spill Prevention, Control and Countermeasure Plans and Storm Water
- 22 Pollution Prevention Plans; and Air Permits applications. I am a registered

Professional Engineer in North Carolina and South Carolina.

In 2005, I joined the Environmental Engineering group at Duke Energy, which became the Waste and Remediation Management Group after the Duke Energy merger with Cinergy Corp. in 2006. I have handled a number of different projects and have extensive experience with site investigation and remediation projects. I also have considerable experience in the investigation and remediation of manufactured gas plant (MGP) sites through my work at Duke Energy and other organizations. In 2013, after the merger with Progress Energy, I became the Manager of the Remediation and Decommissioning Group at Duke Energy.

I have served as Duke Energy's representative on the Electric Power Research Institute (EPRI) Program 50: MGP Site Management Committee and am still an active member. I was on the steering team of EPRI's 2010 and 2013 MGP Symposiums. I am Duke Energy's representative on the Utility Solid Waste Action Group, Remediation Response Committee, where I serve on the following Issue Teams: MGP Survey/Communication Team, Due Diligence, Polycyclic Aromatic Hydrocarbons Risk Analysis, Soil Vapor Intrusion, and Continuing Obligations. I am the chair of the MGP Consortium, a group comprised of twenty-eight utilities where lessons learned and best practices are shared among utility project managers. I am also chair of the North Carolina MGP Group.

20 Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS MANAGER OF 21 THE REMEDIATION AND DECOMMISSIONING GROUP.

As Manager of the Remediation and Decommissioning Group, I oversee employees who 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; these projects include former MGPs. I also continue to serve as a project manager for a number of remediation sites, many of which are former MGP sites.

The job responsibilities for me and the other project managers in my 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 provide the technical evaluation of proposals. 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.

19 Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC 20 UTILITIES COMMISSION OF OHIO?

21 A. Yes. I testified on behalf of the Company in Case No. 12-1685-GA-AIR, *et al.*22 (Natural Gas Rate Case).

1	Q.	DID DUKE ENERGY OHIO CONDUCT REMEDIATION ACTIVITIES IN
2		2013 AT THE TWO FORMER MGP SITES IDENTIFIED IN ITS
3		NATURAL GAS RATE CASE?
4	A.	Yes, the Company conducted remediation activities in 2013 at the two former
5		MGP sites identified in the Natural Gas Rate Case and related testimony as the
6		East End and West End sites. Remediation activities are ongoing at these sites.
7	Q.	PLEASE DESCRIBE THE CORPORATE STRUCTURE AND
8		MANAGEMENT OVERSIGHT OF THESE TWO SITES.
9	A.	The remediation projects at these two sites are managed by Environmental
10		Services as part of the Environmental Health and Safety Department in Regulated
11		Utilities. Environmental Services is headed by a Vice President who oversees
12		Directors who are appointed to manage various disciplines/media programs. The
13		Remediation and Decommissioning Group is specifically located in Air/Waste
14		Programs within Duke Energy. Each level of management has limited authority
15		to approve activities and authorize the expenditure of funds. For new purchase
16		orders, approval also has to be obtained from Duke Energy's sourcing
17		department.
18		Within the Remediation and Decommissioning Group, I review project
19		scopes and activities with each individual project manager on a minimum bi-
20		weekly basis, which I then review with the Director of Air/Waste Programs on a
21		bi-weekly basis. Information on the status and activities on the East End and
22		West End sites is reviewed with the Vice President of Environmental Services, at

least monthly and with the financial department, at least quarterly. Known and

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1	anticipated activities, including cost estimates, are reviewed with levels of senior
2	management at least semi-annually and whenever significant decisions are
3	required on strategy or anticipated costs. Over the course of the year, I meet with
4	a number of members of Duke Energy management to discuss the status of the
5	projects, seek input on certain decisions, and obtain approval of spending
6	requests, as necessary.

7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE

PROCEEDINGS?

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A. I am the project manager for the MGP investigation and remediation projects at East End and West End in Duke Energy Ohio's service territory. My testimony will describe the environmental remediation activities that occurred at the East End and West End locations in Cincinnati, Ohio, in the calendar year 2013. In so doing, my testimony will support the recovery of such expenditures that are requested in Duke Energy Ohio's update to Rider MGP, as authorized by the Public Utilities Commission of Ohio (Commission).

II. BACKGROUND AND HISTORY OF MGP SITES

- 16 Q. THE RECORD IN THE NATURAL GAS RATE CASE DETAILS THE
 17 HISTORY OF MANUFACTURED GAS, AS WELL AS THE TYPICAL
 18 INVESTIGATION AND REMEDIATION OF FORMER MGP SITES. IS
 19 THERE ADDITIONAL INFORMATION TO SUPPLEMENT THAT
 20 PRIOR DETAIL?
- A. No. Information on the background of manufactured gas and its history in southwest Ohio is described at length in the Commission's Opinion and Order in

the Natural Gas Rate Case (Commission Order). Likewise, the Commission's Opinion and Order provides details of typical investigation and remediation activities and a description of the impact of Ohio law and the Ohio Environmental Protection Agency (Ohio EPA) clean-up programs on the management of the environmental conditions at Duke Energy Ohio's MGP sites, especially Ohio EPA's Voluntary Action Program (VAP). This historical information remains accurate today and, as such, I will instead focus my testimony on activities occurring during the period relevant to this proceeding – calendar year 2013.

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All of 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.

III. REMEDIATION AT EAST END AND WEST END MGP SITES

- PLEASE DESCRIBE UTILITY ACTIVITIES AT THE EAST END AND 18 Q. 19 WEST END MGP SITES SINCE THE 2012 DIRECT 20 SUPPLEMENTAL TESTIMONY AND 2013 ORAL TESTIMONY 21 PROVIDED IN THE NATURAL GAS RATE CASE.
- 22 A. Both the East End and West End facilities continue to be used as plant in service

for utility service by I	Duke	Energy	Ohio.
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A.

At West End, portions of the property that were remediated in 2013 and in prior years have been turned over to Duke Energy's Transmission and Distribution Group to begin construction of new electrical equipment that will replace equipment impacted by the proposed new Brent Spence Bridge (BSB) corridor project.

PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2013 THAT 0. 8 **RELATE** TO REMEDIATION THE **OF ENVIRONMENTAL** CONDITIONS RESULTING FROM THE FORMER EAST END MGP.

All work at East End is being conducted under the oversight of an Ohio EPA VAP CP, employed by the firm of Haley & Aldrich. As noted in the Commission's Order, the East End site was initially divided into three smaller identified areas for environmental investigation and remediation purposes that are refered to, for purposes of the VAP, as the "East Parcel," "Middle Parcel," and "West Parcel." In 2013, Duke Energy Ohio performed the next iteration of soil and groundwater sampling on the Middle Parcel and the area west of the West Parcel. The soil sampling effort included a number of test trenches to investigate the location of subsurface utilities and historic structures and to provide an analysis of subsurface conditions that will facilitate remedial planning. Groundwater wells were installed and sampled on the Middle Parcel, reinstalled in areas of the West Parcel where remedial activities previously occurred, and installed in the areas west of the West Parcel to investigate possible impacts from the former MGP operations. All new wells and existing groundwater wells were sampled in 2013.

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Duke Energy Ohio's sampling results have identified MGP residuals on a portion of the area west of the West Parcel, which will require further investigation and will likely require remediation through the VAP.

The soil and groundwater sample results are currently being compiled into Ohio EPA VAP Phase II reports and are being utilized by Duke Energy Ohio, the consultants, and the Ohio EPA VAP CP as part of the process of identifying appropriate remedial technologies to be implemented on the Middle Parcel and the portion of the west of the West Parcel where MGP contaminants are present in concentrations that do not meet applicable standards. As is consistent with Duke Energy Ohio's past practice, the following remedial actions (or combinations thereof) will be analyzed: institutional controls (i.e., soil management plan, use restrictions), engineering controls (i.e., caps, fencing, barrier walls, interceptor trenches), removal actions (i.e., excavation, product recovery), and treatment technologies (i.e., in-situ solidification, chemical treatment). Other potential remedial actions may be added for analysis and some actions may be removed due to site-specific constraints. The results of this evaluation will be documented as part of the decision-making on the remedial strategies that will performed on the Middle Parcel and the west of the West Parcel impacted by MGP constituents.

The reports that detailed excavation and solidification activities, as described in the Commission's Order, that occurred on the East and West Parcels were also finalized in 2013.

Q. PLEASE IDENTIFY THE ACTIVITIES CONDUCTED IN 2013 THAT

1		RELATE TO THE REMEDIATION OF ENVIRONMENTAL
2		CONDITIONS RESULTING FROM THE FORMER WEST END MGP
3		SITE.
4	A.	The work performed in 2013 was, for the most part, a continuation and
5		completion of the work that commenced prior to 2012 and was described in detail
6		in the Commission's Order. The work conducted at West End is being performed
7		under the oversight of an Ohio EPA VAP CP employed by Burns & McDonnell.
8		In 2013, the excavation and solidification activities north of Mehring Way,
9		especially within the "Phase 2A" area, were completed and backfilled with clean
10		material, fencing was reinstalled, and the property was turned over to Duke
11		Energy's Transmission and Distribution Group to begin construction activities for
12		the new electrical equipment. A limited amount of soil sampling was also
13		conducted to the north and the west of the western-most substation south of
14		Mehring Way, in the areas where construction workers will be installing shallow
15		trenches for new electrical equipment.
16		Groundwater monitoring restarted at West End in 2013 in existing wells
17		and in wells that were installed in 2013 in those areas that had undergone
18		excavation and solidification activities.
19		Due to the proximity of a pier proposed as part of the current BSB design,
20		Duke Energy Ohio has begun a limited investigation to determine whether MGP
21		impacts may be present in the areas of the Ohio River that will be disturbed by the
22.		BSB construction project. The limited investigation is being performed under the

oversight of an Ohio EPA VAP CP employed by ARCADIS.

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The limited sediment sampling was performed consistent with permits
and/or approvals obtained from the U.S. Army Corps of Engineers, the Kentucky
Transportation Cabinet, the Ohio Department of Transportation, the U.S. Fish and
Wildlife Services, the Kentucky Department of Fish and Wildlife Resources, the
Ohio Department of Natural Resources Division of Wildlife, and the U.S. Coast
Guard.

A.

Q. PLEASE DETAIL THE 2013 COSTS INCURRED AT BOTH THE EAST END AND WEST END SITES FOR WHICH DUKE ENERGY IS SEEKING RECOVERY THROUGH RIDER MGP.

In 2013, Duke Energy Ohio incurred approximately \$8.35 million in MGP costs at East End and West End. The recovery mechanism for the costs incurred in 2013 is discussed in the Direct Testimony of Duke Energy Ohio witness Peggy A. Laub. The categories of costs that are described at length in the Commission's Order are applicable to the remediation activities that occurred in 2013. External costs include: environmental consultants used for the investigation of the soil, sediment, and groundwater impacts; environmental consultants used to perform perimeter air monitoring during remedial actions; site security while remedial actions were ongoing to minimize the potential for thefts; analytical laboratories that analyzed soil, sediment, groundwater, and ambient air samples; an environmental contractor who was employed to assist in the management and review of reports on the two sites; the environmental consulting firm that provided detailed remedial design, oversight, and construction management, and who also subcontracted construction firms to carry out the remedial actions; fuel

for on-site construction equipment; and landfill disposal costs. Miscellaneous costs include, but are not limited to: utilities; communications support from an external firm and the staffing of a community hotline to address concerns raised by neighbors or other interested parties; utility clearing services; and street flaggers.

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Internal costs include: expenses (air travel, rental cars, hotels, etc.) for Duke Energy employees working on the project; oversight by the Duke 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.

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

As detailed in the Commission's Opinion and Order, Duke Energy Ohio employs 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. 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

1		and estimates through Duke Energy's "Request for Proposal" process. Bids are
2		screened first on their technical merit, and then evaluated for cost. Scope
3		modifications in the field due to new or changing field conditions must be
4		approved by Duke Energy project managers, and may also require approval from
5		Duke Energy management and/or Duke Energy's finance department depending
6		on the extent of the modification and other circumstances.
7	Q.	BASED ON YOUR EXPERIENCE, DID DUKE ENERGY OHIO
8		REASONABLY AND PRUDENTLY INCUR APPROXIMATELY \$8.35
9		MILLION IN COSTS IN 2013?
10	A.	Yes. The activities that occurred at the East End and West End properties related
11		to the remediation of MGP impacts were conducted following the procedures
12		described in my 2012 written testimony and 2013 oral testimony in the Natural
13		Gas Rate Case, activities that were deemed to be prudent by the Commission in
14		its Order. Based on my experience with remediating MGP sites like East End and
15		West End, the approximate \$8.35 million represents reasonable and prudent costs
16		for the work that was performed in 2013.

- 17 Q. PLEASE DISCUSS THE TIMING AND PLANNING RELATED TO THE
 18 WORK THAT WAS PERFORMED IN 2013 AND FUTURE ACTIONS
 19 PLANNED TO BE PERFORMED AT EAST END AND WEST END.
- A. These type of environmental projects are iterative in nature. That is, each step of the process must be taken in the proper order, and it is not prudent to move to the next step until the necessary information is gathered and decisions are made concerning the results and next steps. It is necessary to move deliberately in order

to avoid needless expense and also to avoid having to repeat processes unnecessarily. Typically, therefore, once the areas where the former MGP processes were located have been evaluated and remediated, potential off-site impacts will then be evaluated to determine whether off-site investigation and/or additional remediation will be required. Based upon my experience with MGP site remediation projects and the conditions at the sites, it is expected that some amount of off-site investigations will be required to address the sites. Again, this demonstrates the iterative nature of these projects.

In Ohio, each site is unique and the remedial actions must be sequenced in such a way that remediation can move in a judicial manner without adversely impacting other activities at the site, especially those that ensure the delivery of gas and electricity to Duke Energy Ohio's customers. The actions conducted and planned at the East End and West End facilities are being sequenced to minimize disruptions to operations and to facilitate known future construction activities at each site. As I previously testified in 2012 and 2013, the uplands portion of environmentally impacted sites are typically addressed first as the remediation of the "source" material, or the impacts in the soil, are expected to result in the improvement of groundwater quality and of any down-gradient plumes. Once the impacted soils are addressed, the groundwater is the next area of focus, and then off-site impacts. This is the general sequence that Duke Energy Ohio is implementing on both Ohio MGP sites, initially focusing on the soil and groundwater, and then looking offsite.

By performing the remedial actions in a sequenced manner, Duke Energy

Ohio is not only addressing environmental impacts, but is also performing the actions in a sequence that would allow gas and electrical service to be uninterrupted and which takes into account future construction activities.

Q.

A.

At East End, the initial remedial activities were conducted in areas where the Duke Energy Ohio Gas Department was planning to install new vaporizers (West Parcel) and where a new gas line was anticipated (East Parcel); the activities were also conducted on those two parcels since they were closest to the anticipated residential developments, a change in site use. In 2013, Duke focused on addressing other accessible areas of East End.

At West End, the actions completed in 2013 were in the areas Duke Energy Ohio employees are currently constructing new electrical equipment to replace equipment that will be impacted by the construction of the new BSB corridor project. In 2013, Duke focused on addressing other accessible areas of West End and, in a slight deviation from the normal sequence of activities, performed a limited off-site sediment investigation.

PLEASE DESCRIBE ANY FACTORS OUTSIDE OF DUKE ENERGY OHIO'S CONTROL THAT MAY AFFECT THE TIMING OF THE WORK BEING PERFORMED AT EAST END AND WEST END.

Duke Energy Ohio is diligently working on the two sites, but may face challenges due to the sites' size, operational history, current operational constraints, and factors outside of Duke Energy Ohio's control. For example, there are critical underground structures at East End that will limit what remedial actions can be accomplished. At West End, Duke Energy Ohio cannot investigate and remediate

under the western-most substation at this time without impacting the ability of Duke Energy Ohio to provide electricity to downtown Cincinnati. Engineering and institutional controls can be, and most likely will be implemented and maintained in the short term to manage the known or potential impacts, but the liability will not be fully addressed until the environmental conditions can be fully investigated, analyzed, and remediated, as required.

The timing and expense of the remediation efforts at both East End and West End may be influenced by external factors and the actions of third parties over whom Duke Energy Ohio has very little to no control. Examples of external factors include, but are not limited to, weather delays, unforeseen permitting requirements, access restrictions from off-site property owners, changes in environmental regulations, permitting review timeframes, and completion of work by others in order to allow for remediation activities to be completed. For example, permitting agencies imposed additional and unexpected pre-sampling requirements upon Duke Energy Ohio before they would issue the necessary permits. These requirements, which had not been identified during the initial review of required permits performed by the environmental consultants and the Ohio EPA VAP CP, resulted in a delay of approximately six months.

19 Q. PLEASE EXPLAIN WHAT DUKE ENERGY OHIO IS DOING TO 20 PURSUE OTHER MEANS OF FUNDING THE REMEDIATION AT EAST 21 END AND WEST END.

A. Duke Energy Ohio witness Keith Bone will explain activities related to the Company's efforts to seek insurance coverage for the costs incurred in

remediating the two MGP sites, consistent with the Commission's Order.

Additionally, Duke Energy Ohio continues to investigate and pursue other potentially responsible parties that may be liable to contribute to the costs of investigating and remediating the East End and West End sites. Duke Energy Ohio provided NiSource, Inc., the successor to Columbia Gas & Electric, a letter setting forth Duke Energy Ohio's belief that Columbia Gas/NiSource has legal responsibility for some of the costs of the investigation and cleanup at East End and West End. In early March 2014, representatives of Duke Energy Ohio and NiSource met to discuss this issue further. Duke Energy Ohio anticipates that the parties will have further discussions on this issue.

IV. <u>CONCLUSION</u>

- 11 Q. DOES THIS CONCLUDE YOUR DIRECT PRE-FILED TESTIMONY?
- 12 A. Yes.

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