BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke) Energy Ohio, Inc., for a Certificate of) Environmental Compatibility and Public) Need for the C314V Central Corridor) Pipeline Extension Project.)

Case No. 16-253-GA-BTX

DIRECT TESTIMONY OF

STEPHEN R. LANE

ON BEHALF OF

DUKE ENERGY OHIO, INC.

March 26, 2019

TABLE OF CONTENTS

PAGE

I.	INTRODUCTION AND PURPOSE	1
II.	DISCUSSION	3
III.	CONCLUSION	8

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

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Stephen R. Lane, and my business address is 139 East 4th Street,
Room EM740, Cincinnati, Ohio 45202.

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

- A. I am employed by Duke Energy Business Services LLC (DEBS) as Lead
 Environmental Specialist. DEBS provides various administrative and other
 services to Duke Energy Ohio, Inc., (Duke Energy Ohio or the Company) and
 other affiliated companies of Duke Energy Corporation (Duke Energy).
- 9Q.PLEASEBRIEFLYSUMMARIZEYOUREDUCATIONAL10BACKGROUND AND PROFESSIONAL EXPERIENCE.
- 11 I have received a Bachelor of Science Degree in Biology, a Bachelor of Arts A. 12 Degree in Geography, and a Master of Science degree in Physical Geography 13 from The University of Western Ontario, London, Ontario, Canada. In the past 18 14 years, I have worked on over 25 Ohio Power Siting Board Applications for 15 certificates of Environmental Compatibility and Public Need for power 16 generation, power delivery, and natural gas delivery projects. In addition, I have 17 worked on Ohio Power Siting Board notifications for numerous smaller projects 18 in Ohio that did not meet the requirements for a full certificate application. Also, I 19 have participated in siting and environmental analysis for numerous projects in 20 Indiana, Kentucky, Michigan, West Virginia, Virginia, North Carolina, 21 Pennsylvania, and Illinois. I am also a Certified Project Management Professional

(PMP), Certified Professional in Sediment and Erosion Control (CPESC), and
 American Institute of Certified Planners Certified Planner (AICP).

3 Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS LEAD 4 ENVIRONMENTAL SPECIALIST.

5 A. As a Lead Environmental Specialist my responsibilities at Duke Energy include 6 project siting, licensing, and environmental permitting/compliance. My work is 7 focused on Duke Energy Ohio new asset major construction projects for facilities 8 or sites that have associated environmental permit requirements and obligations, 9 and may include regulatory licenses, permits, approvals, or other documentation. 10 My work occurs primarily during project development but can include oversight 11 through facility construction to operation depending upon the project. In this role, 12 I have worked on projects including: electric transmission and distribution lines, 13 natural gas pipelines, electric substations, natural gas regulating stations, and 14 generation facilities (coal-fired, natural gas, solar, wind, and hydroelectric).

15 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE OHIO POWER 16 SITING BOARD?

17 A. Yes.

18 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS 19 PROCEEDING?

A. The purpose of my testimony is to address certain ecological and environmental
 permitting aspects of the planned Central Corridor Pipeline, as well as issues
 relating to air, water, solid waste, aviation, agriculture, and water conservation.

II. **DISCUSSION**

1	Q.	PURSUANT TO OHIO REVISED CODE SECTION 4906.10(A)(2), THE
2		OHIO POWER SITING BOARD MUST DETERMINE THE NATURE OF
3		THE PROBABLE ENVIRONMENTAL IMPACT OF THE PROPOSED
4		PIPELINE. WHAT ECOLOGICAL IMPACTS SHOULD BE INCLUDED
5		IN THAT DETERMINATION?

A. As part of its determination of the nature of the environmental impact, the Ohio
Power Siting Board (Board) should consider the geology, slopes, and foundation
soil suitability; surface waters in the area of the project; threatened and
endangered species along the proposed routes; and vegetation.

10 Q. PLEASE DISCUSS THE GEOLOGY OF THE AREA IN WHICH THE 11 PREFERRED AND ALTERNATE ROUTES ARE PROPOSED.

A. As discussed in the Company's application in this proceeding, the geology of the
 area in which both routes are located is an area characterized by rolling ground
 moraine of older till, generally lacking ice-constructional features. Bedrock
 geology consists primarily of shale and limestone.

16 Q. IN YOUR OPINION, IS THE GEOLOGY YOU HAVE JUST DESCRIBED

17 SUITABLE FOR THE CONSTRUCTION OF THE PROPOSED

- 18 **PIPELINE**?
- 19 A. Yes.

Q. PLEASE DISCUSS SLOPES AND FOUNDATION SOIL SUITABILITY IN THE AREA OF THE PREFERRED AND ALTERNATE ROUTES.

3 A. Landslides, although a possible occurrence in the area, are generally predictable, 4 as they are typically caused by inherent geologic conditions and, in this area, are 5 generally comprised of surface soil slippages. Landslides are not anticipated to be 6 an issue during construction of the proposed pipeline as slopes in the area of the 7 proposed routes are generally relatively shallow and neither route is dominated by 8 areas having a severe potential for erosion. Where slopes are steeper, these areas 9 will be crossed using Horizontal Direction Drilling (HDD) or the pipeline will be 10 installed perpendicular to the slope. Likewise, soils throughout the project area 11 are generally suitable to installation and operation of natural gas pipelines and the 12 areas currently support numerous existing natural gas pipelines. Where 13 engineering identifies a higher potential for stability issues, mitigation 14 engineering adjustments will be made as appropriate for safe pipeline installation 15 and operations. The project will comply with Ohio Environmental Protection 16 Agency (Ohio EPA) construction storm water permitting requirements during 17 construction activities, to control soil erosion and sediment movement.

18Q.IN YOUR OPINION, ARE THE SLOPES AND FOUNDATION SOIL IN19THE AREA IN WHICH THE PROPOSED PIPELINE WOULD BE20LOCATED SUITABLE FOR ITS CONSTRUCTION AND OPERATION?

21 A. Yes.

1 **O**. PURSUANT TO OHIO REVISED CODE SECTION 4906.10(A)(3), THE 2 OHIO POWER SITING BOARD MUST DETERMINE THAT THE PROPOSED PIPELINE REPRESENTS THE MINIMUM ADVERSE 3 ENVIRONMENTAL IMPACT, CONSIDERING 4 THE STATE OF AVAILABLE TECHNOLOGY AND THE NATURE AND ECONOMICS 5 OF THE VARIOUS ALTERNATIVES, AND OTHER PERTINENT 6 7 CONSIDERATIONS. HOW DO YOU BELIEVE THE BOARD SHOULD 8 **ADDRESS THIS FACTOR?**

9 A. In my opinion, related to the potential environmental impacts of the project, the 10 Board should consider the length of the proposed routes, the number and quality 11 of streams and wetlands crossed, the methods by which the Company would cross 12 those streams and wetlands, how many acres of trees would be cleared in the 13 construction process and the extent to which any large stands of forest would be 14 fragmented, the significance of any air emissions resulting from construction or 15 operation of the pipeline, the impacts on habitat for any state or federal 16 endangered species of plants or wildlife, and any impact of potential soil erosion 17 and sedimentation on these environmental resources.

18 Q. PLEASE DISCUSS ANY IMPACTS OF THE PROPOSED PIPELINE ON 19 STREAMS AND WETLANDS.

A. The project alternatives cross streams and to a lesser extent some wetland areas.
As per the Application, these ecological features were field reviewed and have
been summarized in Tables 8-2 and 8-3. Any impacts to these features will be
permitted as per US Army Corps 404 Clean Water Act and Ohio EPA 401 Water

Quality permitting requirements. These features will be restored following construction activities. Both crossings of the Mill Creek will be accomplished through the use of HDD, with the pipeline being located 35 to 40 feet under the Mill Creek. Floodplain permitting is typically not required for underground facilities except when above-ground structures are planned. Duke Energy Ohio will coordinate with the City of Cincinnati and Hamilton County, as appropriate, to obtain any required floodplain permits.

8 Q. PLEASE DISCUSS ANY IMPACTS OF THE PROPOSED PIPELINE ON 9 TREES AND OTHER VEGETATION.

A. The project will require vegetation clearing along the pipeline easement,
 including removal of shrubs and trees. This vegetation will be replaced by
 maintained grasses within the pipeline right-of-way once the pipeline is installed.

13 Q. PLEASE DISCUSS ANY IMPACTS OF THE PROPOSED PIPELINE ON 14 AIR QUALITY.

A. The project has no expected additional impacts on regional air quality. There are
 no compressor stations or required air permits associated with this project.

17 Q. PLEASE DISCUSS ANY IMPACTS OF THE PROPOSED PIPELINE ON 18 THREATENED OR ENDANGERED SPECIES.

A. As discussed in the Application and as can be seen in the docket for this
proceeding, agency communications have been made with U.S. Fish and Wildlife
Service (USFWS) and the Ohio Department of Natural Resources (ODNR). The
project has a low to moderate potential to impact Indiana and northern long-eared
bats during the maternity roosting season. As per agency recommendations, any

STEPHEN R. LANE DIRECT

1 maternity tree clearing will be planned to occur outside of the maternity roosting 2 windows for these species. If any maternity tree clearing is required inside this 3 window, then USFWS approved mist net studies will be conducted by bat 4 specialists and the results approved by the USFWS before tree clearing occurs. 5 ODNR identified numerous fish species of concern and recommended no in-water 6 work in perennial streams from April 15 through June 30, to reduce impacts to 7 indigenous aquatic species. Duke Energy Ohio will follow these recommended 8 guidelines; any in-stream work that may need to be completed within this window 9 will only be permitted after further coordination with ODNR biologists. ODNR 10 also identified the Sloan's Crayfish and numerous species of threatened and 11 endangered mussels as possibly being found in the project area. Any in-stream 12 work planned in the potential habitat areas of these species will follow ODNR 13 guidelines and Duke Energy Ohio will commence further ODNR coordination 14 with regard to these areas once the final route has been selected and stream 15 crossing methodologies finalized. Due to the urban density along the project 16 routes, other species of concern are unlikely to be found along the project routes, 17 as per the ODNR response.

18 Q. PLEASE DISCUSS ANY IMPACTS OF THE PROPOSED PIPELINE ON 19 EROSION.

A. Project construction has the potential to create soil erosion and sediment
 mobilization from the project site. The project will comply with Ohio EPA
 National Pollutant Discharge Elimination System construction storm water
 permitting rules to control erosion and sedimentation beyond the project limits.

STEPHEN R. LANE DIRECT

1 Construction storm water compliance activities, including regular monitoring 2 inspections and structural control maintenance, will continue until the project 3 right-of-way and workspaces are permanently stabilized as per Ohio EPA General 4 Construction Storm Water Permit OHC000005. Duke Energy Ohio will also 5 coordinate with the City of Cincinnati and Hamilton County to obtain required 6 Excavation and Fill and Earthworks permits, respectively.

7 Q. IS THE BOARD REQUIRED TO CONSIDER THE IMPACT OF THE

8 **PROPOSED PIPELINE ON AGRICULTURE?**

- 9 A. Yes.
- 10 Q. PLEASE EXPLAIN.
- 11 A. There is no active agricultural land affected by the project as proposed.

12 Q. IS THE BOARD ALSO REQUIRED TO CONSIDER THE IMPACT OF

13 THE PROPOSED PIPELINE ON AVIATION?

- 14 A. Yes.
- 15 Q. PLEASE EXPLAIN.
- 16 A. As a buried natural gas pipeline, there are no project impacts to active aviation17 facilities.

III. <u>CONCLUSION</u>

- 18 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
- 19 A. Yes.