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BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

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In the Matter of the Application of Duke )  
Energy Ohio, Inc., for Authority to Defer ) Case No. 16-1106-GA-AAM  
Environmental Investigation and )  
Remediation Costs. )  
  
In the Matter of the Application of Duke ) Case No. 16-1107-GA-UNC  
Energy Ohio, Inc., for Tariff Approval. )

PUBLIC VERSION

**APPLICATION OF DUKE ENERGY OHIO, INC.,  
FOR AUTHORITY TO DEFER ENVIRONMENTAL INVESTIGATION AND  
REMEDIALATION COSTS AND FOR APPROVAL TO AMEND RIDER MGP**

1. Duke Energy Ohio, Inc., (Duke Energy Ohio or the Company) is an Ohio corporation engaged in the business of providing natural gas service to approximately 422,000 customers in southwest Ohio and, as such, is a public utility as defined by R.C. 4905.02 and R.C. 4905.03.

2. Pursuant to R.C. 4905.22, Duke Energy Ohio has an obligation to furnish "necessary and adequate services and facilities" to its natural gas customers in southwest Ohio. In addition, the Company must adhere to the Commission's Mission, which mandates "the availability of adequate, safe and reliable utility service to all...consumers."<sup>1</sup>

3. On November 12, 2009, the Public Utilities Commission of Ohio (Commission) authorized Duke Energy Ohio to defer environmental investigation and remediation costs related

<sup>1</sup><http://www.puco.ohio.gov/puco/index.cfm/how-the-puco-works-for-you/mission-and-commitments/#sthash.a85ToSkO.dpbs>. Emphasis added.

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to two former manufactured gas plant (MGP) sites in Ohio for potential recovery in a future base rate proceeding.<sup>2</sup>

4. On November 13, 2013, the Commission authorized the recovery of such environmental investigation and remediation costs as had been incurred by the Company between 2008 and 2012, further establishing the mechanism pursuant to which subsequently incurred costs would be recovered.<sup>3</sup> Through this order, the Commission authorized Duke Energy Ohio to recover and continue deferring environmental investigation and remediation costs.<sup>4</sup>

5. In approving the Company's recovery of reasonable and prudent costs incurred in the provision of public utility service, the Commission initially established dates by which such deferral authority would end. Specific to Duke Energy Ohio's environmental investigation and remediation costs applicable to its property known as the East End site, the Commission found that the Company could continue to defer and recover costs incurred through December 31, 2016.<sup>5</sup> The recovery period, however, is not absolute. Indeed, the Commission expressly recognized that arduous conditions could render such ten-year period unreasonable.<sup>6</sup> And the Commission thus allowed Duke Energy Ohio the right to seek an extension of its deferral and the related recovery period in the event of exigent circumstances.<sup>7</sup>

6. Duke Energy Ohio submits that exigent circumstances have arisen, impeding environmental investigation and remediation efforts at the East End site. These circumstances,

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<sup>2</sup> *In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Defer Environmental Investigation and Remediation Costs*, Case No. 09-712-GA-AAM, Finding and Order, at pg. 4 (November 12, 2009).

<sup>3</sup> *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No. 12-1685-GA-AIR, *et al.*, Opinion and Order, at pp. 70-74 (November 13, 2013)(hereinafter the Commission's Order).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*, at pg. 72.

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*, Entry on Rehearing, at pg. 4 (January 8, 2014).

which are described in greater detail herein, form the bases for the Company's request for continued authority to defer costs incurred by it in remediating the remaining affected areas related to the East End site consistent with its legal obligations and for extension of the rider arrangement in respect of such costs as described in the Commission's Order.

7. The exigent circumstances giving rise to the Company's Application are, in large part, a function of the heavily regulated natural gas business in which Duke Energy Ohio engages. It is undeniable that the business of transporting and delivering natural gas is subject to stringent regulation, at both the federal and state levels. And these regulations, which have at their core the purpose of protecting safety and enabling reliable service, govern Duke Energy Ohio's gas operations business and function to establish the minimum parameters pursuant to which it must operate. These parameters are incorporated into Duke Energy Ohio's corporate policies for the purpose of protecting the safety of its employees and the community and allowing adequate and reliable service to the Company's customers.

8. At the federal level, the prevailing regulations are those established by the Pipeline and Hazardous Materials Safety Administration (PHMSA), which was created by the Department of Transportation. Within PHMSA, the Office of Pipeline Safety "ensures safety in the design, construction, operation and maintenance, and spill response planning of America's 2.6 million miles of natural gas and hazardous liquid transportation pipelines."<sup>8</sup> These comprehensive regulations, codified in Title 49 CFR Parts 190-199, extend to Duke Energy Ohio's natural gas operations. Additional operational oversight is provided through the National Fire Protection Association (NFPA), an entity that develops codes and standards intended to minimize the risks of fire and explosion, including those risks existing in respect of natural gas.

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<sup>8</sup> [www.phmsa.dot.gov/regulations](http://www.phmsa.dot.gov/regulations)

9. At the state level, both Ohio law and Commission regulation provide a general framework within which Duke Energy Ohio must operate its natural gas business. The foundation for such a framework came from the General Assembly, which authorized the Commission to establish rules and enforcement procedures necessary to protect public safety.<sup>9</sup> In response thereto, the Commission promulgated O.A.C. 4901:1-13, which establishes minimum safety standards for local distribution companies, including Duke Energy Ohio. Among other obligations, Duke Energy Ohio must adhere to the Commission's pipeline safety code, as set forth in O.A.C. 4901:1-16.<sup>10</sup> The Company has incorporated such standards into its Commission-approved tariffs.<sup>11</sup>

10. In connection with its oversight of natural gas operations under its jurisdiction, the Commission has also made provision for accessing utility records and such other information as necessary to determine compliance with its regulations.<sup>12</sup> Pursuant thereto, the Commission's Office of Pipeline Safety routinely reviews Company procedures and actual operational activities so as to ensure adherence to federal and state natural gas pipeline safety code.

11. This extensive regulatory oversight applies to the Company's activities at the East End site, which is a functioning, natural gas operations center and a propane air peak shaving facility. From this location, the Company operates an extensive network of pipelines and physical structures, all of which are vital to its obligation to provide customers with safe, reliable service. Located primarily on the Middle Parcel are substantial facilities and structures, including a propane air peak shaving plant, sensitive utility infrastructure, underground natural gas pipelines, and physical structures that house, among other things, compressors and a

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<sup>9</sup> R.C. 4905.91.

<sup>10</sup> O.A.C. 4901:1-13-02(G)(1).

<sup>11</sup> See Duke Energy Ohio Gas Service Regulations, Section I – Service Agreements, P.U.C.O. Gas No. 18, Sheet 20.3.

<sup>12</sup> O.A.C. 4901:1-13-03.

measurement station. All natural gas operations performed at this facility and in reliance upon this infrastructure are conducted pursuant to applicable regulation, codes, and standards.

12. Concurrent with its ongoing dependence upon the East End site to serve its natural gas customers, Duke Energy Ohio undertook, and continues to engage in, environmental investigation and remediation activities at the site. Indeed, as the Company's rider true-up filings confirm, it has diligently continued to investigate and remediate the East End site consistent with its legal obligations and the processes approved by the Commission. These activities have been undertaken in consultation with a certified professional under the Ohio Environmental Protection Agency's (Ohio EPA) Voluntary Action Program (VAP) pursuant to Ohio Adm. Code 3745-300-01, *et seq.*

13. As previously described by the Company and recognized by the Commission, the East End site was segregated into different areas to facilitate an efficient remediation process. These areas were designated as the East Parcel, Middle Parcel, West Parcel, and the area west of the West Parcel. Investigation and remedial efforts were first directed to the East Parcel and West Parcel due to the proximity of encroaching residential developments. As discussed below, such sequencing was necessary as simultaneous remediation of all of the parcels could not be accomplished safely, prudently, and consistent with the Company's obligations in respect of its natural gas operations.

14. Duke Energy Ohio has continued to work diligently to responsibly investigate and remediate the East End site – property that continues to be utilized as a natural gas distribution center. Duke Energy Ohio's efforts since the Commission's Order include, but are not limited to: extensive evaluation of the soil and groundwater of the remaining upland areas that must be addressed at the East End site; evaluation of remedial alternatives for these remaining upland

areas; solicitation of bids from consultants to design and implement the remedial activities in areas of ongoing gas operations and plant operations; evaluation of bids from several consultants and selection of a consultant; and preparation of the remedial design for the remaining upland areas of the East End site. The remaining upland property to remediate, which is pertinent to this Application, includes the Middle Parcel and a small area just west of the West Parcel.

15. Federal and state regulation preclude Duke Energy Ohio from engaging in activities that could threaten the safe operation of its natural gas infrastructure, expose its employees and contractors or the general public to unreasonable risk or danger, or compromise its obligation to make available to all consumers safe, adequate, and reliable service. These prevailing regulations prevented, and continue to prevent, the Company from investigating or remediating the Middle Parcel during the winter heating months when propane facilities are integral to the provision of natural gas service. And the prohibition against working around active natural gas facilities situated in the Middle Parcel was particularly evident during the winter heating months in 2013 and 2014. During those periods, unprecedented and sustained cold temperatures – including an unusual polar vortex – resulted in prolonged and unanticipated reliance upon the natural gas infrastructure located at and natural gas operations performed from the East End site. Summarily stated, during these winter periods, Duke Energy Ohio could not engage in active environmental investigation and remediation techniques in respect of the Middle Parcel or the area west of the West Parcel, which would include excavation and *in situ* solidification, as doing so would threaten the safe, unimpeded operation of its natural gas infrastructure used to serve customers and the safety of its employees and the surrounding community. The Company could not, as a reasonable and prudent operator, expose its employees and contractors or the general public to the risk of disruptions in service or other catastrophic

harm caused by compromising or otherwise interfering with active natural gas pipelines and associated equipment.

16. The composition of the Middle Parcel, which includes sensitive underground infrastructure, has further complicated the Company's efforts in undertaking the necessary environmental investigation and identifying, through consultation with its VAP certified professional, the appropriate remediation techniques (*e.g.*, drilling, excavation, augering, performing *in situ* solidification) for the Middle Parcel and the area west of the West Parcel, as described further herein.

17. Duke Energy Ohio has understood the general nature of the subsurface conditions of the Middle Parcel. But until site assessments, including soil and groundwater sampling and delineation of the non-aqueous phase liquid, were complete for that parcel and the area west of the West Parcel in 2014, Duke Energy Ohio could not reasonably or accurately confirm the level of contamination at these sites or the specific areas requiring remediation. Further, it could not identify the extent to which atypical precautions would be necessary to prevent damage to or otherwise compromising the integrity of the confirmed, buried infrastructure. These assessments and an evaluation of remedial alternatives were essential to determining the degree of remediation activity necessary. And as the investigations confirmed, remediation of these areas will be multifaceted due to the unique complexities present in these remaining areas, including the previously unknown and/or unconfirmed location of contamination with respect to gas lines and other structures and the extent of the complex geology present at the Middle Parcel.

18. The complexity of the Middle Parcel also required additional investigation to accurately identify the subsurface conditions, which necessarily extended the amount of time needed to prepare and implement a safe remediation plan for the Middle Parcel and the area west

of the West Parcel. And the completion of the Ohio VAP Phase II and Pre-Design Investigation were critical to understanding the actual subsurface conditions to be encountered during remediation. For example, it was discovered during the investigatory process that there are thick concrete walls around the former tar separators and other historical subsurface concrete structures that must carefully be demolished and removed in a manner that does not exceed vibration criteria. Steel sheet piling cannot be used as the shoring method in the Middle Parcel due to concerns related to excessive vibration; therefore, a more intricate pile and lagging system must be installed. Further, additional study and investigation were required to understand whether and how the remediation could impact the potential migration of MGP impacts. Duke Energy Ohio also recently discovered an unknown void in the area west of the West Parcel that must be understood to facilitate a safe and cost-effective remedial design.

19. The location of vibration-sensitive utility infrastructure has further impeded work because additional time has been needed to design, plan, and implement the Middle Parcel remediation work in a safe and protected manner. Excessive vibrations from investigation and remediation activities can damage the integrity of sensitive underground gas operations structures, including high pressure force mains, critical underground infrastructure, and other integral equipment. [REDACTED]

[REDACTED]

[REDACTED]<sup>13</sup> Given the sensitive nature and location of these structures in the Middle Parcel, Duke Energy Ohio was

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<sup>13</sup> Duke Energy Ohio, Inc., was granted indefinite protective treatment of critical energy infrastructure information. See *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No. 12-1685-GA-AIR, *et al.*, Opinion and Order, at pp. 8-9 (November 13, 2013) (“However, given that the exhibits contain sensitive utility infrastructure, consistent with previous rulings on such critical energy infrastructure information, the Commission finds that it would be appropriate to grant protective treatment indefinitely, until the Commission orders otherwise.”). Consistent therewith, the information herein related to critical infrastructure is protected from public disclosure.



compelled to identify new construction methods to reduce vibrations at the site, which are uniquely challenging and add more time to the remediation schedule. Thus, although the Company has conducted vibration monitoring at the East and West Parcels, the continuous vibration monitoring needed during remediation at the Middle Parcel is more critical. Damaging the structures at the Middle Parcel could not only disrupt gas service to Duke Energy Ohio's customers, but could threaten the safety of the Company's employees, nearby residents, and the environment.

20. As a further consequence of the extreme weather conditions during the 2013 and 2014 winter seasons, the need for propane increased significantly. As on-site propane reserves were depleted at unusually high rates, additional supply was needed. But the supply had to be replenished in a controlled manner so as to minimize ignition sources and ensure a safe working environment for those persons located on the property or in close proximity thereto. This controlled manner of unloading propane is governed by various regulations and standards. For example, NFPA 58 dictates the loading and unloading of propane at East End and mandates the removal of ignition sources within a certain radius during such times. Because this standard must be read in concert with the state's natural gas safety code, the obligation to protect the public, and the expectation that utilities reliably provide service, Duke Energy Ohio adheres to more stringent requirements. These requirements, as reviewed by Commission Staff consistent with the state's natural gas pipeline safety code, are intended to prevent ignition sources within a substantial radius of propane filling operations so as to avoid catastrophic events and sustained loss of service. Because heavy equipment needed for investigation and remediation work and construction is an ignition source, such equipment could not be used near the propane facilities during loading and unloading activities. Further, access to the unloading facility, including

egress and ingress, was restricted to ensure ignition sources were eliminated and safe access was maintained for the transporting vehicles. Thus, as a result of the unexpected and unpredictable weather occurrences, there were extended periods in 2014 and 2015 during which the Company was unable to perform invasive investigation or remediation activities at the site, such as excavation, drilling, augering, or construction in areas around sensitive or critical facilities.

21. Remediation and investigation at the East End site has also been hampered by periodic operational impediments because the site is an active, natural gas operations center and propane air peak shaving facility. For example, in 2014, a sensitive subsurface structure was discovered to be potentially leaking. As a result, additional processes and considerations for managing the potential release in the subsurface had to be incorporated into the remedial design to include monitoring when excavating or installing borings and procedures if a substance was encountered during monitoring.

22. As previously stated, the Middle Parcel includes many underground gas lines that are currently used by Duke Energy Ohio in providing on-going service to customers. Due to the potential risks of remediating in close proximity to active gas lines and Duke Energy Ohio's obligation to reliably serve, select gas lines may need to be temporarily shut off for certain remediation activities to occur. But taking gas lines out of service cannot be done in isolation, without regard to system needs and customer demand. Rather, these external needs and demands significantly influence such work and the time period by which it may be completed.

23. The complexities that were discovered during the investigation phase of the Middle Parcel also led to protracted negotiation of the terms of the contract between Duke Energy Ohio and its consultant, Haley & Aldrich, for the work at the Middle Parcel and the area west of the West Parcel. Until a final agreement on the contract terms was reached with its

counterparty, Duke Energy Ohio could not proceed with the remaining investigation and remediation at the site.

24. Environmental investigation and remediation efforts must be properly sequenced so that they can be performed in an efficient manner that does not pose an unreasonable threat to human health and safety or the environment, disrupt natural gas service, or imprudently increase costs. The cumulative effect of the exigent circumstances described above caused a ripple effect that significantly limited the pace and amount of work at the East End site and impeded the Company's efforts toward completing remediation at the site.

25. The appropriate sequencing of work also militates against hastening the pace of work for the sole purpose of accelerating the completion date. Indeed, the ability to accelerate work was not viable due to safety, regulatory, and site constraints. For example, remediation activities require a permit-to-install from Ohio EPA for air emissions<sup>14</sup> or an Ohio EPA Director's exemption.<sup>15</sup> Such authorizations require implementation of site controls that manage dust, odors, and vapors, which has the effect of limiting the pace of active remediation. Additionally, landfill capacity limitations further restricted the scope and pace of work that could be performed.

26. Reacting to external events and adhering to applicable regulation that have prevented certain environmental investigation and remediation activities from occurring, the Company has reasonably balanced its legal obligation to remediate the East End site in a safe and prudent manner with its obligation to provide its customers with safe and reliable natural gas service. It has acted with public and employee safety being of utmost importance, refusing to create circumstances that unreasonably or carelessly exposed persons or property to harm. The

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<sup>14</sup> O.A.C. 3745-15-05(B).

<sup>15</sup> O.A.C. 3745-31-03(A)(3)(g).

Company also has a responsibility to its customers to investigate and remediate this site in an efficient and prudent manner without incurring unnecessary additional expense. As a consequence of these exigent circumstances, the Company was limited in the pace by which it could address its legal obligation to remediate the site.

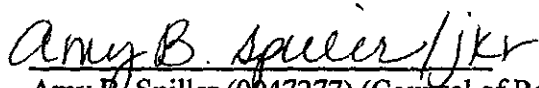
27. Duke Energy Ohio respectfully requests that the Commission authorize it to: (i) continue deferring environmental investigation and remediation costs subsequent to December 31, 2016, and (ii) to seek recovery of such costs via Rider MGP in the same manner as provided for its November 13, 2013, Opinion and Order. In this regard, Duke Energy Ohio seeks only an extension of the Rider MGP recovery mechanism in respect of the East End site and not any revision to the manner in which such mechanism, as approved by the Commission on November 13, 2013, in Case No. 12-1685-GA-AIR, *et al.*, operates.

28. R.C. 4905.13 authorizes the Commission to establish systems of accounts to be kept by public utilities and to prescribe the manner in which these accounts shall be kept. The Federal Energy Regulatory Commission has established a Uniform System of Accounts for gas utilities. This system of accounts is applicable to Ohio's regulated gas utilities only to the extent it has been adopted by the Commission, such adoption which results from O.A.C. 4901:1-13-01.

29. Duke Energy Ohio requests that the Commission authorize Duke Energy Ohio to extend its current accounting procedures and permit Duke Energy Ohio to defer income statement recognition of environmental investigation and remediation costs for the East End site after December 31, 2016. The recovery of the deferred amount will be addressed consistent with the process established in Case No. 12-1685-GA-AIR, *et al.* Duke Energy Ohio proposes to record all costs as a regulatory asset on its balance sheet in Account 182.3, Other Regulatory Assets.

30. The requested change in accounting procedure does not result in any increase in any rate or charge and the Commission can therefore approve this Application without a hearing.

Respectfully submitted,

  
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