BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Duke Energy Ohio, Inc. Environmental Control Plan	))	Case No. 12-1225-EL-ECP

DUKE ENERGY OHIO, INC.'S ENVIRONMENTAL CONTROL PLAN

Pursuant to Section 4901:1-41-03 of the Ohio Administrative Code, Duke Energy Ohio, Inc. hereby submits the attached Environmental Control Plan.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that a copy of the foregoing has been served via electronic mail, this 13th day of April, 2012 upon the following:

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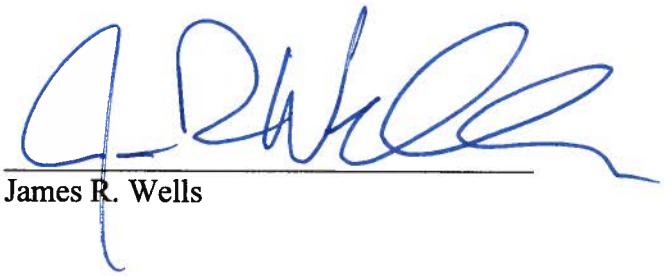

James R. Wells

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Duke Energy Ohio, Inc.

Environmental Control Plan

April 13, 2012

Air Quality

Duke Energy Ohio, Inc. (Duke Energy Ohio) is required to comply with numerous state and federal air emission regulations. In addition to current programs and regulatory requirements several new regulations are in various stages of implementation and development that will impact operations at Duke Energy Ohio in the coming years. Some of the major rules include:

Clean Air Interstate Rule (CAIR) and the Cross-State Air Pollution Rule (CSAPR)

The US Environmental Protection Agency (EPA) finalized its Clean Air Interstate Rule (CAIR) in May 2005. CAIR limits total annual and summertime NO_X emissions and annual SO_2 emissions from electric generating facilities across the Eastern U.S. through a two-phased cap-and-trade program. In December 2008, the D.C. Circuit issued a decision remanding CAIR to the EPA, allowing CAIR to remain in effect as an interim solution until EPA develops new regulations.

In August 2010, EPA published a proposed replacement rule for CAIR, known as the Transport Rule (TR). The rule was finalized as the Cross-State Air Pollution Rule (CSAPR) on August 8, 2011. The CSAPR, which establishes state-level annual SO_2 caps and NOx budgets and ozone-season NO_X budgets, was to take effect on January 1, 2012. However, on December 30, 2011, the rule was stayed by the U.S. Court of Appeals for the D.C. Circuit. EPA will continue administering CAIR pending the court's resolution of the case with oral arguments scheduled in April 2012. The SO_2 and NOx budget levels decline in 2014 for most states, including Ohio. The rule allowed unlimited intrastate allowance trading but restricted interstate trading through an assurance provision mechanism; which now takes effect January 1, 2014. Depending on the outcome of the stay and the court challenge, CSAPR may not take effect until

January 1, 2013 or later. The CSAPR trading restrictions coupled with lower than proposed SO2 allowance allocations in Ohio will add to Duke Energy Ohio's cost of complying with the regulation. The State of Ohio has indicated that it intends to develop a CSAPR State Implementation Plan (SIP) at some point. At such time, the allocations may change. Currently, no additional controls are planned to be installed for CSAPR compliance. Compliance will likely by through allowance purchases, use of low sulfur coal, power purchases and other means.

Mercury and Air Toxics Standard (MATS)

In February 2008 the D.C. Circuit Court of Appeals issued an opinion vacating the Clean Air Mercury Rule (CAMR). EPA announced a proposed Utility Boiler Maximum Achievable Control Technology (MACT) rule in March, 2011 to replace CAMR. The EPA published the final rule, known as the Mercury and Air Toxics Standards (MATS), in the Federal Register on February 16, 2012. The rule regulates Hazardous Air Pollutants (HAPs) and establishes unit-level emission limits for mercury, acid gases, and non-mercury metals as well as organics standards for coal and oil-fired electric generating units. Compliance with the emission limits will be required within three years of the effective date of the rule (April 16, 2012). The rule gives permitting authorities the discretion to grant up to a 1-year compliance extension, or a case-by-case basis, to sources that are unable to install emission controls before the compliance deadline. The one-year extension to meet compliance is not to be granted for units set to retire.

The full impact on Duke Energy Ohio plants by this rule is still being evaluated along with compliance options. However, the rule may potentially drive the accelerated retirement of Duke Energy Ohio's Beckjord's units rather than the installation of controls to comply.

National Ambient Air Quality Standards (NAAQS)

8 Hour Ozone Standard

In March 2008, EPA revised the 8 hour ozone standard by lowering it from 84 to 75 parts per billion (ppb). In September of 2009, EPA announced a decision to reconsider the 75 ppb standard in response to a court challenge from environmental groups and its own belief that a lower standard was justified. However, after much debate, EPA decided to retain the 75 ppb primary standard until it is reconsidered under the next 5-year review, which is expected to be proposed in October 2013 and finalized in July 2014 (possibly in the 60 to 70 ppb range). The earliest attainment dates for a standard revised in 2014 would likely be 2019, and would depend on a nonattainment area's classification.

On February 7, 2012, EPA proposed the first of two implementation rules for the 2008 standard. Based on that proposal, the Cincinnati area will be classified as a "marginal" nonattainment area. A marginal area has three years to attain the standard. The second implementation rule that EPA will propose likely in summer 2012 will address policies on required control measures that will presumably include guidance on EPA's view regarding Reasonably Available Control Technology (RACT). That proposal should provide important information that will help assess the need to reduce NOx emissions at facilities in and near the Cincinnati nonattainment area in response to the 2008 standard. In its February 2012 proposal, EPA offered as its preferred option to set December 31, 2015 as the actual attainment date for marginal areas.

SO_2 Standard

In November 2009, EPA proposed a rule to replace the current 24-hour and annual primary SO_2 NAAQS with a 1-hour SO_2 standard. A new 1-hour standard of 75 ppb was finalized in June 2010. States with non-attainment areas will have until January 2014 to submit

their SIPs. Initial attainment dates are expected to be the summer of 2017 with any required controls in place by late-2016. EPA will base its nonattainment designations on monitored air quality data as well as on dispersion modeling. All Ohio power plants will be modeled by the State and are therefore potential targets for additional SO_2 reductions, even if there is no monitored exceedance of the standard. It is anticipated that any unit without advanced SO2 controls would not model compliance with the new standard.

In addition, EPA is proposing to require States to relocate some existing monitors and to add new monitors. While these monitors will not be used by EPA to make the initial nonattainment designations, they will play a role in identifying possible future nonattainment areas.

Greenhouse Gas Regulation

The US EPA has been active in the regulation of greenhouse gases (GHGs). In May 2010 the EPA finalized what is commonly referred to as the Tailoring Rule, which sets the emission thresholds to 75,000 tons/year of CO_2e for determining when a source is potentially subject to Prevention of Significant Deterioration (PSD) permitting for greenhouse gases. The Tailoring Rule went into effect beginning January 2, 2011. Being subject to PSD permitting requirements for CO_2e will require a Best Available Control Technology (BACT) analysis and the application of BACT for GHGs. BACT will be determined by the state permitting authority. Since it is not known if, or when, a Duke Energy Ohio generating unit might undertake a modification that triggers PSD permitting requirements for GHGs and exactly what might constitute BACT, the potential implications of this regulatory requirement are unknown. Also, EPA has deferred, for a period of three years, application of the PSD and Title V permitting requirements to CO2 emissions from bio-energy stationary sources. EPA will use this time to

evaluate these sources to determine PSD applicability and its carbon position relative to biomass use.

On March 27, 2012, EPA signed a proposed rule to establish GHG new source performance standards (NSPS) for new electric utility steam generating units (EGUs). The proposed CO2 NSPS applies only to new pulverized coal, IGCC and natural gas combined cycle units. The proposed NSPS is an output-based emission standard of 1,000 lb CO2/gross MWh of electricity generation. As there are no cost-effective and demonstrated controls for CO2 for new or existing units, if finalized as proposed, the GHG NSPS would effectively preclude construction of new coal units.

The proposal excludes new simple cycle turbines from the regulation. EPA is not proposing an emission standard for NSPS modified or reconstructed units. EPA states in the proposal that its current definition of an NSPS modification specifically exempts pollution control projects on an existing unit (for example, projects to comply with MATS or CSAPR).

EPA has not given any indication when it might propose a GHG NSPS rule for existing sources. Passage of any federal climate change legislation is not expected until 2013 or later.

CO_2 Control Planning

A key to significantly reducing CO_2 emissions from electricity generation is to develop and deploy new low- and zero-emitting generation technologies. Duke Energy is pursuing the deployment and demonstration of new energy efficiency programs, renewable generation, advanced nuclear and integrated gasification combined cycle (IGCC) technologies for power generation and the demonstration of carbon capture and storage (CCS) technology. Deploying these projects will contribute significantly to Duke Energy's ability to manage its climate change regulatory risk. Ohio is positioned well for a carbon constrained future due to the passage of

Senate Bill 221. Senate Bill 221 when fully implemented in 2025 has an energy efficiency requirement of 22%, 12.5% renewable energy requirement and an additional 12.5% advanced energy requirement that can be served with additional renewables, nuclear or IGCC.

One of the most significant technologies for reducing/avoiding future CO_2 emissions from electricity generation is nuclear power. Today, Duke Energy operates seven nuclear units with over 7,000 megawatts of generating capacity. Duke Energy's nuclear generation program, which began with the first unit commencing operation in 1973, has been a tremendous success for the company, its customers, and its shareholders. Duke Energy has received 20-year extensions to the operating licenses for all seven units from the U.S. Nuclear Regulatory Commission (NRC), which means that this essential non-CO_2 emitting generation will be operating and helping to mitigate Duke Energy's climate change regulatory risk for many years to come. Expanding the use of nuclear power is essential for reducing future CO_2 emissions from electricity generation in the U.S. Duke Energy has submitted an application for a Construction and Operating License (COL) to the Nuclear Regulatory Commission for a new 2,234 megawatt 2-unit nuclear-powered generating facility in Cherokee County, South Carolina. While submitting the COL application does not commit Duke Energy to build the facility, it does keep the nuclear option available to Duke Energy as a potential significant climate change risk mitigation option. Not only is having the nuclear option available in the future critical for U.S. energy security, but also, if significant reductions in greenhouse gas emissions are mandated, new nuclear power plants must be a key part of the U.S. and Duke Energy strategy for achieving those reductions.

The continued use of coal, the most abundant domestic energy resource in the U.S., also plays a key role in Duke Energy's strategy to manage climate change regulatory risk. New low

CO_2 emitting coal-based technologies must be developed and demonstrated to facilitate the continued use of coal in a carbon constrained world. Duke Energy is building a 618 MW state-of-the-art IGCC electric generating unit at its Edwardsport, Indiana site that will replace pulverized coal generating units constructed in the late 1940's and early 1950's. The new plant is currently expected to be operational in 2012. IGCC technology gasifies solid fuels, typically coal, and uses the gas to fuel high-efficiency combined-cycle turbines to generate electricity. IGCC technology holds tremendous potential for the future as it can serve as a platform for being able to cost-effectively capture CO_2 emissions from coal-fired generation. Once captured, the CO_2 can be stored underground in appropriate geologic formations instead of being released to the atmosphere. Duke Energy's Edwardsport IGCC facility is located in a region where Illinois Basin geology holds significant promise for being able to store a large quantity of CO_2. Duke Energy conducted an engineering study for a CO_2 capture system for the Edwardsport IGCC facility, and submitted a plan to perform site identification and characterization for geologic CO_2 sequestration for the Edwardsport facility to the IURC. IGCC technology has the potential to allow for the continued use of the country's vast coal reserves to help meet the country's future energy needs while significantly reducing CO2 emissions. Therefore, development and demonstration of IGCC technology is a key part of a Duke Energy overall strategy for mitigating potential climate change regulatory risk.

Duke Energy is helping advance the demonstration of geologic CO_2 storage technology through its participation in three of the U.S. Department of Energy's (DOE) Regional Carbon Sequestration Partnership. For example, as a member of the Midwest Regional Carbon Sequestration Partnership Duke Energy is helping demonstrate the technical feasibility and cost-effectiveness of sequestering CO_2 in geologic formations in the Midwest, identify gaps and

necessary regulations to support commercial deployment of the technology, and evaluate life-cycle storage options according to environmental risk, measurement, monitoring and verification protocols, public acceptance and value-added benefits. Duke Energy is hosting a geologic CO_2 storage demonstration project at its East Bend Station electric generating facility in Kentucky to help characterize the potential sequestration opportunities in the region. The demonstration project involves injecting approximately 1,000 tons of CO_2 into the Mt. Simon deep saline reservoir – considered one of the largest and highest potential saline aquifers for CO_2 storage in the United States. Duke Energy's project at East Bend Station, actually the first project to inject CO_2 into the Mt. Simon reservoir, was a great success. Once more projects have demonstrated the viability of geologic storage of CO_2, it can be added to the list of technology options available to Duke Energy to help it manage future climate change regulatory risk. When operational these facilities will reduce Duke Energy's CO_2 intensity and as a result the risks from climate change regulation. Duke Energy's 2010/2011 Sustainability Report (http://sustainabilityreport.duke-energy.com/default.asp) contains more details on our efforts to reduce our environmental footprint.

Water Quality

CWA 316(b) Cooling Water Intake Structures

Federal regulations in Section 316(b) of the Clean Water Act may necessitate cooling water intake modifications for existing facilities to minimize impingement and entrainment of aquatic organisms. All Duke Energy Ohio facilities are potentially affected sources under that rule.

EPA published its proposed rule on April 20, 2011 and plans to finalize the rule in July 2012. With an assumed timeframe for compliance of 3 years, implementation of selected

technology is possible as early as mid-2015.

The proposed rule establishes mortality reduction requirements due to both fish impingement and entrainment and advances one preferred approach and three alternatives. The EPA's preferred approach establishes aquatic protection requirements and new on-site facility additions for existing factilities with a design intake flow of 2 million gallons per day (mgd) or more from rivers, streams, lakes, reservoirs, estuaries, oceans, or other U.S. waters that utilitze at least 25% of the water withdrawn for cooling purposes. At this time, it is not clear what impacts this rule may have on Duke Energy Ohio's generating units.

Steam Electric Effluent Guidelines

In September 2009, EPA announced plans to revise the steam electric effluent guidelines, which have not been revised since 1982. The steam electric effluent guidelines regulation is technology-based, in that limits are based on the capability of the best technology available. The primary focus of the revised regulation is coal-fired generation, thus the major areas likely to be impacted are FGD wastewater treatment systems and ash handling systems. The EPA may set limits that dictate certain FGD wastewater treatment technologies for the industry and may require dry fly ash handling systems to be installed. According to a joint stipulation filed by EPA and environmental groups on April 3, 2012, EPA now plans to issue a draft rule by November 20, 2012 and a final rule by April 28, 2014. After the final rulemaking, effluent guideline requirements will be included in a station's NPDES permit renewals. Thus requirements to comply with NPDES permit conditions may begin as early as 2017 for some facilities. The deadline to comply will depend upon each station's permit renewal schedule. Steam electric effluent guidelines may also revise thermal discharge requirements.

Waste Issues

Coal Combustion Residuals

Following TVA's Kingston ash dike failure in December 2008, EPA began an effort to assess the integrity of ash dikes nationwide and to begin developing a rule to manage coal combustion residuals (CCRs). CCRs primarily include fly ash, bottom ash and Flue Gas Desulfurization byproducts (gypsum). Since the 2008 dike failure, numerous ash dike inspections have been completed by EPA and an enormous amount of input has been received by EPA, both for and against strict regulation, as it developed proposed regulations. In June 2010, EPA published its proposed rule regarding CCRs. The proposed rule offers two options: 1) a hazardous waste classification under RCRA Subtitle C; and 2) a non-hazardous waste classification under RCRA Subtitle D, along with dam safety and alternative rules. Both options would require strict new requirements regarding the handling, disposal and potential re-use ability of CCRs. The proposal will likely result in more conversions to dry handling of ash, more landfills, the closure or lining of existing ash ponds and the addition of new wastewater treatment systems. Final regulations are possible by the end of 2012. EPA's regulatory classification of CCRs as hazardous or non-hazardous will be critical in developing plans for handling CCRs in the future. The impact to Duke Energy Ohio as proposed is still being assessed. Compliance with new regulations is generally expected in the 2017 to 2021 timeline.

Summary: Notice Notice of Filing of Duke Energy Ohio Inc.'s 2012 Environmental Control Plan electronically filed by Ms. Lisa A DeMarcus-Eyckmans on behalf of Duke Energy Ohio