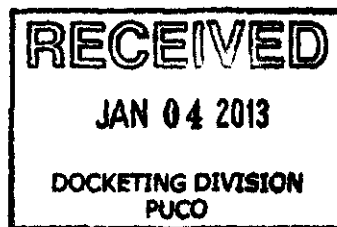


**A report by the Staff of the  
Public Utilities Commission of Ohio**

Duke Energy Ohio, Inc.  
Case Number 12-1685-GA-AIR et al.



This is to certify that the images appearing are an  
accurate and complete reproduction of a case file  
document delivered in the regular course of business  
Technician LLH Date Processed JAN 04 2013

STAFF'S REPORT  
OF  
INVESTIGATION

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
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No. 12-1686-GA-ATA
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of an Alternative Rate Plan for Gas Distribution Service.	)	Case No. 12-1687-GA-ALT
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.	)	Case No. 12-1688-GA-AAM
	)	

Submitted  
to  
The Public Utilities Commission of Ohio



BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

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
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No. 12-1686-GA-ATA
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of an Alternative Rate Plan for Gas Distribution Service.	)	Case No. 12-1687-GA-ALT
	)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.	)	Case No. 12-1688-GA-AAM
	)	

Todd A. Snitchler, Chairman  
Lynn Slaby, Commissioner  
Steven D. Lesser, Commissioner  
Andre T. Porter, Commissioner  
Cheryl L. Roberto, Commissioner

To The Honorable Commission:

In accordance with the provisions of the Ohio Revised Code Section 4909.19, the Commission's Staff has conducted its investigation in the above matter and hereby submits its findings in this Staff Report.

The Staff Report has been jointly prepared by the Commission's Utilities Department and Service Monitoring and Enforcement Department.

Copies of the Staff Report have been filed with the Docketing Division of the Commission and served by certified mail upon the mayors of all affected municipalities and other public officials deemed representative of the service area affected by the application. A copy of said report has also been served upon the utility or its authorized representative. Interested parties are advised that written objections to any portion of the Staff Report must be filed within thirty (30) days of the date of the filing of said report after which time



the Commission will promptly set this matter for public hearing. Written notice of the time, place, and date of such hearing will be served upon all parties to the proceeding.

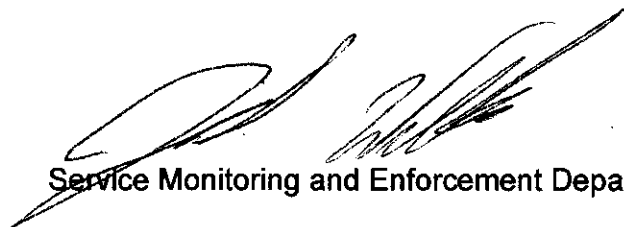
The Staff Report is intended to present for the Commission's consideration the results of the Staff's investigation. It does not purport to reflect the views of the Commission nor should any party to said proceeding consider the Commission as bound in any manner by the representations or recommendations set forth therein. The Staff Report, however, is legally cognizable evidence upon which the Commission may rely in reaching its decision in this matter. (See *Lindsey v. Pub. Util. Comm.*, 111 Ohio St. 6 (1924)).

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Jodi Bair".

Utilities Department

Jodi Bair  
Director

A handwritten signature in cursive script, appearing to read "John Williams".

Service Monitoring and Enforcement Department

John Williams  
Director

## STAFF ACKNOWLEDGEMENTS

The Staff Report components reflect the results of investigations conducted by the Staff of the Applicant's rate application. The Staff person responsible for each component is shown below:

### **Utilities Department**

Operating Income and Rate Base	Ross Willis
Rate of Return	Joseph Buckley
Rates and Tariffs	Chuck Goins
Management and Operations Review	David Hupp

### **Service Monitoring and Enforcement Department**

Reliability and Service Analysis Division	Peter Baker
Investigations and Audits Division	Mary Vance
Facilities and Operations Division	Peter Chace



## TABLE OF CONTENTS

	Page
<b>BACKGROUND .....</b>	1
<b>OPERATING INCOME AND RATE BASE .....</b>	3
Scope of Investigation .....	3
Revenue Requirements.....	3
Allocations .....	4
Rate Base .....	4
Operating Income.....	9
<b>RATE OF RETURN .....</b>	15
<b>RATES AND TARIFFS .....</b>	18
Tariff Analysis.....	18
Riders.....	20
Rate Design and Revenue Analysis.....	21
Rate Tables.....	24
<b>MANUFACTURED GAS PLANT EXPENSE RECOVERY INVESTIGATION ..</b>	30
<b>PIPELINE SAFETY .....</b>	65
<b>PROPOSED ALTERNATIVE REGULATION PLAN.....</b>	69
<b>DUKE MANAGEMENT AND OPERATIONS REVIEW.....</b>	78
<b>SCHEDULES</b>	
A-1 Overall Financial Summary .....	85
A-2 Computation of Gross Revenue Conversion Factor .....	86
B-1 Jurisdictional Rate Base Summary.....	87
B-2 Plant in Service Summary by Major Property Groupings.....	88
B-2.1 Plant in Service by Accounts and Subaccounts .....	89
B-2.2 Adjustments to Plant in Service .....	94
B-2.5a Property excluded from Rate Base.....	95
B 2.5b Property Excluded from Rate Base (for reasons other than rate area allocations) .....	100
B-2.5c Property Excluded from Rate Base (for reasons other than rate area allocations) .....	101
B-2.5d Property Excluded from Rate Base (for reasons other than rate area allocations) .....	102

## TABLE OF CONTENTS

(Continued)

	Page
B-3	Accumulated Depreciation and Amortization..... 103
B-3.1	Adjustments to Accumulated Depreciation and Amortization ..... 108
B-3.2	Depreciation Accrual Rates & Jurisdictional Reserve Balances by Accounts 109
B-4	Construction Work in Progress ..... 114
B-5	Allowance for Working Capital Allowance ..... 115
B-6	Other Rate Base Items Summary..... 116
B-7	Jurisdictional Allocation Factors Rate Base and Operating Income 118
C-1	Jurisdictional Proforma Income Statement ..... 119
C-2	Adjusted Test Year Net Electric Operating Income (NEOI) ..... 120
C-3	Summary of Jurisdictional Adjustments to Operating Income ..... 121
C-3.1	Annualized Revenue ..... 126
C-3.2	Intentionally Left Blank ..... 128
C-3.3	Rate Case Expense..... 129
C-3.4	Annualized Wage Adjustment ..... 130
C-3.5	Annualized Depreciation Expense..... 131
C-3.6	Interest on Customer Service Deposits ..... 133
C-3.7	Ohio Excise Tax ..... 134
C-3.8	Property Tax Adjustment..... 135
C-3.9	Eliminate Pipp Revenue and Expense ..... 136
C-3.10	Interest Expense Deductible..... 137
C-3.11	Smart Grid Amortization Adjustment ..... 139
C-3.12	State Tax Rider..... 140
C-3.13	Budget Expenses ..... 141
C-3.14	Eliminated Non-Jurisdictional Expense ..... 142
C-3.15	Amortize of PUCO and OCC Assessments..... 143
C-3.16	Adjustment for Uncollectible Expense ..... 144
C-3.17	Annualize Pension and Benefits Expense ..... 145
C-3.18	Annualize Payroll Taxes ..... 146
C-3.19	Intentionally Left Blank ..... 147
C-3.20	Annualize Amortization of PISCC..... 148
C-3.21	Intentionally Left Blank ..... 150
C-3.22	Amortize Camera Work ..... 151
C-3.23	Eliminate Merger Costs ..... 152
C-3.24	Additional Camera Work Expense..... 153
C-3.25	Intentionally Left Blank ..... 154
C-3.26	Smart Grid Savings Adjustments..... 155
C-3.27	Increased Medical Costs ..... 156
C-3.28	Intentionally Left Blank ..... 157
C-3.29	Intentionally Left Blank ..... 158
C-4	Adjusted Jurisdictional Federal Income Taxes ..... 159

## TABLE OF CONTENTS

(Continued)

		Page
D-1	Rate of Return Summary.....	160
D-1.1	Equity Issuance Cost Adjustment.....	161
D-1.3	CAPM Cost of Equity Estimate.....	162
D-1.4	DCF Cost of Equity Estimate.....	169
D-1.5	D Non-Constant DCF Calculation.....	176
D-1.6	DUK Non-Constant DCF Calculation.....	177
D-1.7	ED Non-Constant DCF Calculation.....	178
D-1.8	NU Non-Constant DCF Calculation.....	179
D-1.9	XEL Non-Constant DCF Calculation.....	180
D-1.10	Growth in U. S. Gross National Product 1929-2011.....	181
E-5	Typical Bill Comparison.....	183



## **BACKGROUND**

The Applicant, Duke Energy Ohio, Inc., (Duke, Applicant or the Company) was incorporated in Ohio on April 3, 1897, as Cincinnati Gas, Light and Coke Company. It was renamed Cincinnati Gas & Electric Company (CG&E) in 1901, and its present name Duke Energy Ohio, Inc. was adopted in 2006. Growth, acquisitions and mergers throughout the years have resulted in the present operation in which the Applicant renders electric or gas service, or both, in ten counties in Ohio. The Applicant is a public utility engaged in the business of distribution and sale of gas to approximately 426,000 customers located in eight counties in the southwest section of Ohio.

On October 24, 1994, the Applicant, then known as the Cincinnati Gas & Electric Company, merged with PSI Resources, Inc. to form Cinergy Corporation. Cinergy was the parent company to both PSI Energy, Inc. (PSI Resources' utility subsidiary) and Cincinnati Gas & Electric Company, and provided various services to both companies through its Cinergy Services, Inc. subsidiary. On April 3, 2006, the Applicant's parent, Cinergy Corporation became a wholly owned subsidiary of Duke Energy Corporation.

On June 7, 2012, the Applicant filed a notice of intent to file an application for an increase in rates to be charged for gas service for its entire service area subject to the jurisdiction of the Commission (Case No. 12-1685-GA-AIR). The Applicant's filing also included a notice of intent to file an application for tariff approval for its gas service (Case No. 12-1686-GA-AIR). The Applicant also noticed an alternative rate plan for its gas distribution service (Case No. 12-1687-GA-ALT), as well as noticing its intent to file an application for approval to change accounting methods (Case No. 12-1688-GA-AAM).

On July 2, 2012, Duke Energy Corporation merged with Progress Energy Inc. and gained approval from both companies' shareholders and all necessary regulatory bodies. In accordance with the terms of the merger agreement, Progress Energy Inc. became a wholly owned direct subsidiary of Duke Energy Corporation.

The Applicant is proposing several new tariffs. Rider ASRP (Accelerated Service Line Replacement Program), is part of the Applicant's alternative rate application to replace main-to-curb and curb-to-meter service lines. Rider FRT (facilities relocation and transportation) tariff is a proposed means for the Company to recover the cost of relocations associated with mass transportation projects initiated by governmental subdivisions. Rider NGV (Natural Gas Vehicle), is to encourage the development of natural gas as a fuel alternative for customers investing in natural gas vehicles or natural gas vehicle fueling stations. Rider GGIT (Gas Generation Interruptible Transportation), is meant to encourage the development of distributed generation by



providing eligible customers with a discount over the interruptible transportation tariff. Rider ED (Economic Development), is proposed to fund the cost of economic development activity at one million dollars per year on development projects and activities in the service territory. The Applicant is also proposing to change the charge for reconnection of service from \$17 to an amount equal to the total of avoided costs.

In the alternative rate application, the Applicant seeks the Commission approval to amend the terms of the accelerated main replacement program (Rider AMRP) to include relocation of interior meter to a suitable exterior location, and reflect removal of the current rider rate caps. The Applicant also seeks to continue to recover its investment in its grid modernization initiative, including its advanced utility rider (Rider AU). Finally, to implement a new rider (Rider ASRP) to replace both pre-1971 coated steel and other unprotected metallic main-to-curb and curb-to-meter service lines not covered by AMRP, and to relocate interior meters to a suitable exterior location.

The application for approval of a change in accounting methods involves the approval of accounting treatment for continued deferral authority related to manufactured gas plant (MGP) cleanup activities. In Case No. 09-712-GA-AAM, the Commission granted the Applicant authority to defer costs related to the remediation of two former MGP sites. Because remediation efforts are not yet complete, the Applicant proposes to continue to defer costs for recovery in the future. The Applicant does propose to begin recovery of costs spent to date through an operation and maintenance expense adjustment in the present application for an increase in rates (Case No. 12-1685-GA-AIR).

The rates proposed by the Applicant for increase, when applied to test year sales volumes, would generate approximately \$44,607,929 of additional retail base rate revenues. The total revenue increase, over test year operating revenues is approximately 18-09%.

## **OPERATING INCOME AND RATE BASE**

### **SCOPE OF INVESTIGATION**

The scope of investigation was designed to determine if the Applicant's filed exhibits concerning test year operating income, rate base and other data are reasonable for ratemaking purposes, and if the financial and statistical records supporting the data can be relied upon. The Staff interviewed the Applicant's key management personnel and reviewed both internal and published financial reports to assure understanding of the Applicant's operation and organization. The Staff's investigation of test year operating income included a review of the Applicant's budget and forecasting techniques, verification of the operating revenue computation, and an examination of the Applicant's continuing property records. In addition, the existence and the used and useful nature of the assets were verified through physical inspections. Other independent analyses were performed as the Staff considered necessary under the circumstances.

The Staff reviewed and analyzed the Applicant's proposed adjustments to operating income and rate base and traced them to supporting work papers and to source data. As a result of its review and analysis, the Staff accepted some of the proposed adjustments as appropriate, changed some proposed adjustments using alternative approaches, and/or proposed new adjustments as required to make the test year operating income and date certain rate base consistent with sound regulatory accounting practices, and more representative of normal operations and appropriate for ratemaking purposes.

The purpose of the Staff's investigation was to develop financial data for ratemaking purposes. It was not intended to provide a basis for expressing an opinion on the financial statements of the Company as a whole. The following sections of this report summarize the results of the Staff's investigation, which it believes are relevant to the determination of test year operating income and rate base.

### **REVENUE REQUIREMENTS**

Schedule A-1 presents the Staff's determination of the Applicant's revenue requirements. The Staff recommended revenue increase is shown on Staff's Schedule A-1. This determination is based on the examination of the accounts and records of the Applicant for the twelve months ended December 31, 2012, the test year in this proceeding. The results of its examination are summarized in this report, and the schedules that incorporate the Staff's recommended rate of return, rate base, and adjusted test year operating income.

## **ALLOCATIONS**

On July 31, 2008 Duke filed an application for approval of their corporate separation plans, in accordance with Rule 4901:I-37-05(A), Ohio Admin. Code (Corporate Separation Case). The Commission selected Silverpoint Consulting LLC and Vantage Consulting, Inc. (Silverpoint) to assist the Commission with the evaluation of Duke's corporate separation plans. Silverpoint completed its audit and submitted its report of investigation on March 29, 2010. On April 11, 2011, the Commission issued its Opinion and Order in the Corporate Separation Case. Based on the auditor's evaluation and the Commission's directives, which Duke had committed to satisfy, the Commission concluded that Duke had, in all material respects, implemented their corporate separation plan, is in compliance with Section 4928.17, Ohio Admin. Code, and the orders of the Commission.

Part of this audit relied on Silverpoint to assess of Duke Energy's allocation methodology and its sample transactions. This audit found no material weakness in the methodology. Therefore, Staff is of the opinion that the allocation factors proposed by the Applicant are appropriate and reasonable for the purposes of this proceeding.

### **Plant in Service Allocations**

#### **Common Plant (Gas and Electric) Allocation**

The Applicant used a 16.5% allocation factor to allocate common plant to gas operations in this rate proceeding. This factor is the reciprocal of common plant allocated to electric operations.

## **RATE BASE**

The rate base represents the net value of Applicant's plant and other assets as of the date certain, March 31, 2012, which was used and useful in providing gas utility service to its customers and upon which its investors are entitled to the opportunity to receive a fair and reasonable rate-of-return.

The Staff's recommended rate base is divided into Plant In Service, Depreciation, Construction Work In Progress, Working Capital, and Other Rate Base Items. A comparison of rate base submitted by the Applicant and that, which is recommended by the Staff, is shown on Schedule B-1. Schedules B-2 through B-7 provides additional support to the Staff's figures.

## **Plant In Service**

The Plant In Service presented by the Applicant is the surviving original cost of the plant which is used and useful in providing gas utility service to the Applicant's customers. The Staff tested the Applicant's plant accounting system to ascertain if the information in the Applicant's plant ledgers and supporting continuing property records (CPR) represents a reliable source of original cost data. The Staff also conducted physical inspections to verify the existence of property and to determine its used and useful nature. The Staff determined that there were no significant discrepancies and that the Applicant's plant ledgers and CPR represent a reliable source of original cost data.

As a result of its investigation, the Staff recommends that certain adjustments be made to plant in service for ratemaking purposes. These adjustments are identified below summarized on Schedule B-2.2, and are reflected in the calculation of jurisdictional plant in service figures on Schedule B-2.1.

### **Distribution Plant:**

#### **ARO Gas Mains Exclusion**

Both the Applicant and Staff excluded the Asset Retirement Obligation (ARO) plant in service and depreciation reserve balances from rate base. The adjustment is shown on Schedule B-2.5c.

### **General Plant:**

#### **Gas Rider AU Exclusion**

Previously the Staff recommended certain plant in service adjustments in the Duke Rider AU update filed in Case No. 12-1811-GE-RDR. Since the Company has proposed 'rolling' the Rider AU into the current base rate case, the Staff recommends the same plant in service adjustments to Miscellaneous Intangible Plant and Communication Equipment. These adjustments are presented on Schedule B-2.5d.

### **Common Plant:**

#### **Hartwell Recreation Facility Exclusion**

Both the Applicant and the Staff proposed an adjustment to exclude the entire date certain investment for the Hartwell recreation facility. This facility is used primarily for recreational purposes and contracted for use by outside parties. These adjustments are presented on Schedule B-2.5a.

**Hartwell Golf Course Exclusion**

The Staff proposed an adjustment to exclude costs associated with a golf course not used and useful in providing utility service which the Company unintentionally left in rate base. This adjustment is shown on Schedule B-2.5b.

**Envision Center Exclusion**

The Staff excluded the entire date certain investment in the Envision Center, a leasehold improvement located in Kentucky. Benefits claimed by the Applicant come in the form of customer education. It is a shared facility, and the Applicant did not demonstrate how many customers were Ohio ratepayers. These adjustments are presented on Schedule B-2.5b.

**Leasehold Improvements**

During the Staff's plant inspection, Staff determined a portion of the Holiday Park building which contained the vestibule, the customer service section, and the Atrium II building are no longer being occupied nor leased by the Company.

Staff also excluded areas or items of the Fourth & Walnut (Clopay) building that were either not being occupied or unidentifiable by the Company. These adjustments are presented on Schedule B-2.5b.

**ARO Common General Plant Exclusion**

Both the Applicant and Staff excluded the Asset Retirement Obligation (ARO) plant in service and depreciation reserve balances from rate base. The adjustment is shown on Schedule B-2.5c.

**Depreciation**

Depreciation is the process which distributes the original cost of depreciable assets, adjusted for net salvage, over the normal life of the property in a systematic and rational manner. The Staff's investigation of depreciation is segregated into two areas: Depreciation Reserve, and Depreciation Accrual Rates and the corresponding Depreciation Expense. Each of these is discussed in detail in the following sections.

**Depreciation Reserve**

The Applicant maintains depreciation reserve, by account, on a total Company basis. The Staff adjusted the Applicant's depreciation reserve to exclude reserve associated with the adjustments as discussed in the Plant in Service section. The Staff also made an adjustment to exclude the

Asset Retirement Obligation because cost of removal is already included in the prescribed accrual rates therefore eliminating the double accounting. These adjustments are summarized on Schedule B-3.1.

In order to determine if the Applicant's booked reserve for depreciation is proper and adequate, the Staff generally finds it useful to compare the book reserve with a calculated theoretical reserve, as a guide to whether past accrual rate calculations have been appropriate. The Staff compared the Applicant's booked reserve level with a calculated theoretical reserve, based on the Staff's recommended accrual rates and plant and reserve balances as of December 31, 2012. The Staff determined that the overall booked reserve is in close agreement with the theoretical reserve calculation. Therefore, it is the Staff's opinion that the actual jurisdictional reserve for depreciation, as adjusted by the Staff on Schedule B-3, is proper and adequate and should be used for purposes of this proceeding.

#### **Depreciation Accrual Rates and Depreciation Expense**

The Applicant's current depreciation accrual rates were prescribed by this Commission in Case No. 07-589-GA-AIR for the gas plant accounts and in Case No. 08-709-EL-AIR for the common plant accounts.

The Applicant filed a depreciation study for its gas plant performed by its consultant, Gannett Fleming Valuation and Rate Consultants, Inc. The Applicant's accrual rates, for most gas plant accounts, were developed using the straight-line average service life method of depreciation. For Structures and Improvements - Major and Structures and Improvements - Leaseholds, a lifespan analysis was used. For certain General Plant gas accounts, the annual depreciation amounts were based on amortization accounting.

The Staff conducted a review of the depreciation study provided by the Applicant. The Staff finds itself in general agreement with the service life, projected retirement dispersion and net salvage parameters proposed in the Applicant's study. However, the Staff noted small differences in some accounts between the accrual rates proposed by the Applicant and those that the Staff calculated based on the parameters proposed.

The Staff recommended accrual rates are shown on Schedule B-3.2. The Staff recommends that the Applicant be ordered to use the accrual rates shown on Schedule B-3.2 for book depreciation purposes, effective concurrently with customer rates resulting from this proceeding.

The Staff has long maintained that accrual rates should be thoroughly reviewed at least every three to five years. The Staff, therefore, recommends that in five years Applicant submit a depreciation study for all gas plant accounts.

The Staff's calculation of depreciation expense based on the adjusted jurisdictional plant in service balances at date certain and the accrual rates discussed above, is shown on Schedule B-3.2.

### **Construction Work In Progress**

The Applicant did not request any allowance for construction work in progress in its filing and Staff, as shown on Schedule B-4, did not recommend an allowance.

### **Working Capital**

Working capital has been generally defined as the average amount of capital provided by investors in the Company, over and above the investments in plant and other specifically identified rate base items, to bridge the gap between the time that expenditures are required to provide service and the time collections are received for the service.

The Applicant's working capital request was a thirteen month average balance for gas enricher liquids, gas stored underground, materials and supplies, other, minus a thirteen month balance of customer deposits.

The Applicant did not prepare a lead lag study for this case therefore; the Staff can not recommend a working capital allowance as shown on Schedule B-5

### **Other Rate Base Items**

The Staff reduced rate base by the date certain balances of customer advances for construction, post retirement benefits and accumulated unrestricted investment tax credits. The Staff also reflected a net reduction of deferred taxes created by timing differences of tax to book expense recognition.

Other rate base items are detailed on Schedule B-6.

## **OPERATING INCOME**

The Applicant's test year operating income consists of three months of actual data for the period January 1, 2012 through March 31, 2012, and nine months of forecasted data for the period April 1, 2012 through December 31, 2012. The Staff adjusted the Applicant's test year operating income as required to render it appropriate as a basis for setting rates.

The Staff's proforma operating income is the Staff's adjusted test year operating income modified to reflect the Applicant's increase in revenues and the associated increases in uncollectible accounts expense and federal income taxes.

Schedules C-1 and C-2 present the Staff's determination of operating income. The calculations, methodologies and rational used to develop the Staff's adjusted and proforma operating income are detailed on Schedules A-1.1, C-3.1 through C-3.29 and C- 4. Schedules C-3.2, C-3.19, C-3.21, C-3.25, C-3.28, and C-3.29 are intentionally left blank.

### **Proforma Adjustments**

Schedule C-1 sets forth the Applicant's proposed increase in operating revenues based on the Applicant's proposed rates and associated increases in uncollectible expenses and federal income taxes.

### **Current Adjustments**

#### **Base Revenue**

Both the Staff and the Applicant adjusted base revenues to eliminate unbilled revenue and all rider revenue. The Staff and the Applicant also adjusted test year base revenue to the amounts calculated on Schedule E-4. The Staff adjusted test year revenue to recognize an average consumption per customer methodology. Staff adjusted all sales and transportation tariffs according to customer MCF usage. This methodology takes into account a customer's proclivity to conserve, while accurately measuring their consumption. The Staff also adjusted other revenue in order to annualize those test year sales to the most recent rates. The Staff's adjustment is presented on Schedule C-3.1.

#### **Gas Cost Expense**

The Staff and the Applicant synchronized the test year gas cost recovery rider revenues (GCR) and gas cost expense by annualizing test year gas sales with an EGC rate of \$5.362/MCF. The adjustment also eliminates unbilled gas cost revenues and unbilled gas cost expenses.



The Staff's gas cost expense adjustment is included in Schedule C-3.1.

**Schedule C-3.2 is Intentionally Left Blank.**

**Rate Case Expense**

The Staff adjusted test year expense to reflect only the cost of the current case proceeding. The Staff excluded \$96,998 which is associated with the Applicant's previous rate case, Case No. 07-589-GA-AIR. The Staff believes that an estimate of \$405,000 is reasonable and recommends a five-year amortization period.

The Staff recommends that the Commission review the Applicant's revised estimate of rate case expense which should be submitted as a late filed exhibit before making a final determination of the appropriate level of rate case expense in this proceeding. The Staff's adjustment is shown on Schedule C-3.3.

**Wage Annualization**

The Applicant adjusted operating income to reflect the annualized O&M labor expense as of April 2012 and to reflect raises. The Staff annualized direct labor based on average hourly rates as of the first pay period of August 2012, using actual employee levels for both exempt and union employees. All union and non-union raises were in effect at this date. The Staff used a three year average for both overtime pay and the operation and maintenance labor to total labor percentages. Staff also used actual incentive pay percentages applicable to operational goals for each employee.

For Duke Energy Business Services, the Staff included actual O&M labor expense as of December 31, 2011, in its total annualized O&M labor expense.

The Staff's adjustment is reflected on Schedule C-3.4.

**Depreciation Expense**

Depreciation expense was adjusted to reflect the Staff's recommended depreciable plant in service as of the date certain. This adjustment is presented on Schedule C-3.5, with supporting calculations provided on Schedule B-3.2. Further discussion on depreciation can be found in the Rate Base Section of this Report.

**Interest on Customers' Deposits**

Consistent with the treatment of customers' deposits as an offset to rate base, both the Applicant and Staff adjusted test year expenses to include interest associated with these deposits. The Staff's adjustment is shown on Schedule C-3.6.

**Ohio Excise Tax Liability Rider**

The Staff and the Applicant adjusted test year revenues and expenses to eliminate both the Ohio excise tax liability rider (ETR) revenue and the Ohio excise tax expense from the test year. The Staff's adjustment is presented on Schedule C-3.7

**Property Tax Expense**

The Applicant and Staff adjusted operating income to annualize property tax expense to reflect the latest rates and valuation percentages and applied those to plant in service as of March 31, 2012. The Staff's adjustment is shown on Schedule C-3.8.

**Percentage of Income Payment Plan**

The Staff and the Applicant adjusted test year revenues and expenses to synchronize the percentage of income payment plan (PIPP) rider revenues with the expense. The Staff's adjustment is presented on Schedule C-3.9.

**Interest Expense**

The Staff and the Applicant adjusted the federal income tax expense calculation for the deductible interest expense allowance (weighted cost of debt times rate base) and to eliminate the deferred allowance related to allowance for funds used during construction and the deferred allowance related to capitalized interest. The Staff's adjustment is reflected on Schedule C-3.10.

**Smart Grid Amortization**

Both the Applicant and Staff adjusted test year operating income to eliminate deferred depreciation and prior period O&M from the test year. These expenses will be recovered through Rider AU and will not be part of the revenue requirement in the rate case. The Staff's adjustment is shown on Schedule C-3.11.

### **State Tax Rider**

The Staff and the Applicant adjusted test year revenues and expenses to eliminate the state tax rider (STR) revenues and the expense from the test year. The Staff's adjustment is presented on Schedule C-3.12.

### **Test Year Budgeted Expenses**

The Staff adjusted the budgeted portion of specific expense accounts included in the Applicant's test year. The Staff's investigation determined the adjustment was necessary due to the significant variance with the account actuals in both the test year and in prior years. The Staff adjusted the accounts to actuals for the first three quarters of the test year and used a thirteen month average for each month of the remaining quarter. The Staff's adjustment is shown on Schedule C-3.13.

### **Non-Jurisdictional Expenses**

Both the Staff and the Applicant eliminated non-jurisdictional operating expenses from test year operating expenses. Included in the unadjusted test year are industry association dues, advertising expenses, and other expenses not recoverable in gas distribution rates. The Staff's adjustment is presented on Schedule C-3.14.

### **PUCO and OCC Assessments**

The Staff adjusted operating expenses to reflect PUCO and OCC assessments to the latest known level. The Staff's adjustment is shown on Schedule C-3.15

### **Uncollectible Expense**

The Applicant and the Staff annualized the test year uncollectible expense to reflect the adjustments to operating revenues. This adjustment also eliminates revenues collected from the Company's uncollectible tax rider and deferred expenses related to over/under collection of uncollectible amounts. The Staff's adjustment is presented on Schedule C-3.16.

### **Pension and Benefits Expense**

The Applicant and the Staff annualized O&M pension and benefits expense to reflect annualized O&M labor expense. The annualized O&M pension and benefits expense was derived by applying loading rates to the Staff's annualized O&M labor expense. The loading rates were based on actual Duke Energy Business Services and Duke Energy Ohio expenses year to date March 2012. The Applicant's jurisdictional test year O&M pension and benefits expense was derived from Schedule C-2.1, Account 926. The difference between the two expense amounts results in a

reduction to annualized O&M pension and benefits expense. The Staff's Adjustment is reflected on Schedule C-3.17.

**Payroll Taxes**

The Staff adjusted test year operating income to annualize payroll taxes based on annualized salaries and wages as determined on Schedule C-3.4. The Staff's adjustment is presented on Schedule C-3.18.

**Schedule C-3.19 is Intentionally Left Blank.**

**Post In Service Carrying Cost**

The Applicant and the Staff adjusted test year expenses to annualize post in service carrying costs (PISCC) related to AMRP and grid modernization accrued as of March 31, 2012. Staff also adjusted this amount due to corrections to plant-in-service in the SmartGrid filing and also for an error in the calculation of PISCC for AMRP discovered from a data request. The Staff's adjustment is presented on Schedule C-3.20.

**Schedule C-3.21 is Intentionally Left Blank.**

**Amortize Camera Work**

In Case No. 09-1097-GA-AAM, The Commission authorized the Applicant to defer legacy camera inspection expense associated with replacement of gas mains occurring between 2001 and 2006 in its AMRP program. The Applicant was authorized to defer up to \$5 million of expense, including carrying charges, at a rate equal to Duke's average cost of debt.

In this case, the Applicant adjusts test year operating expenses to amortize the recovery of the \$5 million deferral through a three-year amortization. Staff believes the three-year amortization is appropriate and that the annual recovery of approximately \$1.67 million will allow the Company to complete and perhaps accelerate completion of the camera inspections of gas pipeline replacement work that occurred between 2001 and 2006. Staff further recommends that Duke report annually to the Commission on the progress made in the legacy camera inspection program. The Staff's adjustment is shown on Schedule C-3.22.

**Merger Costs**

Both the Applicant and Staff adjusted test year operating income to eliminate merger expenses related to Progress Energy included in the test year. The Staff's adjustment is presented on Schedule C-3.23.

**Additional Camera Work**

The Applicant adjusted test year operating expense to include additional AMRP camera inspection expense expected to be incurred in 2013. The Staff believes the amortization of the \$5 million deferral as discussed above, provides sufficient revenue to complete and accelerate camera inspections of gas pipeline replacement work that occurred between 2001 and 2006. The Staff's adjustment removes the additional expense from the test year. The Staff's adjustment is shown on Schedule C-3.24.

**Schedule C-3.25 is Intentionally Left Blank.**

**Smart Grid Savings**

Both the Applicant and Staff adjusted test year operating expense to add back Smart Grid savings which have already been flowed-through to customers in Smart Grid rider cases. These savings result from reduced meter reading and meter order expense. The Staff also eliminated the unadjusted test year expense that was inappropriately included in the Applicant's test year. The Staff's adjustment is presented on Schedule C-3.26.

**Medical Costs**

Both the Applicant and Staff adjusted test year medical expense to recognize the increase in medical expense. The Staff's adjustment is shown on Schedule C-3.27.

**Schedule C-3.28 is Intentionally Left Blank.**

**Schedule C-3.29 is Intentionally Left Blank.**

**Income Taxes**

The Staff computed test year federal, state income taxes to reflect the recommended adjustments to operating income and rate base. The Staff's federal income tax computation reflects inter-period interest allocation and normalization of tax accelerated depreciation and other tax-to-book timing differences. Staff's federal income tax calculation is presented on Schedule C-4.

## **RATE OF RETURN**

The Staff recommends a rate of return in the range of 7.19% to 7.73%. The recommended rate of return was developed using a cost of capital approach which reflects a market-derived cost of equity and the Applicant's embedded cost of long-term debt.

### **Capital Structure**

The Applicant is a wholly-owned subsidiary of Duke Energy Corporation, which is a publicly traded public utility holding company. The Staff used the Capital Structure of the Applicant which is 46.70 % debt, and 53.30% equity. Staff believes that in this case using the Applicant's capital structure is appropriate based on the financial environment.

### **Cost of Long Term Debt**

The Staff employed the embedded cost of long term debt of Applicant after pollution control notes were removed, as of March 31, 2012 from Applicant's Schedule D-3A. The pollution control notes were removed because they are primarily generation related and therefore not part of the distribution function. The embedded cost of long term debt is 5.32%.

### **Cost of Common Equity**

The Staff considered a group of utilities which are representative of the Applicant for purpose of cost of equity estimation. This group consists of companies publicly traded on the New York Stock Exchange, and are categorized as electric utility companies by Value Line but also have gas operations, and have a Value Line financial strength rating of between B++ and A+. In addition they all have positive growth projections and a market capitalization of at least \$10 billion.

### **Company Name**

Dominion Resources	D
Duke Energy	DUK
Consolidated Edison	ED
Northeast Utilities	NU
Xcel Energy	XEL

The Staff employed a cost of equity estimate for the comparable group companies that used the capital asset pricing model (CAPM) and the discounted cash flow (DCF) derived estimates. In calculating its CAPM cost of common equity estimate, the Staff employed the average of the Value Line betas, being .64 and the Ibbotson<sup>i</sup> derived spread of arithmetic mean total returns between large company stocks (11.8%) and long term government bonds (i.e., "risk free return"; 6.1%). These were used in the CAPM formulation with the weighted average of 10 year and 30 year daily closing Treasury Yields for the period from 9/30/11 through 9/28/12. The averaged 10 year yield is 1.76%. The averaged 30 year yield is 2.75%. This averaged to 2.255%. This was added to the average product of the beta .64 and the 5.7% spread, and resulted in a CAPM cost of equity estimate of 5.9%.<sup>ii</sup>

In calculating its DCF cost of common equity estimate, for each comparable company, the Staff employed the annual average stock price, the sum of the last four quarterly dividends, estimates of the expected rate of growth of earnings. The stock price employed is the average daily closing price for the period from 9/30/11 through 9/28/12. The DCF model assumes that earnings growth and dividends growth are the same. The Staff averaged earnings per share estimates from Yahoo, MSN, Reuters and Value Line to get DCF growth estimates for each company." The Value Line average incorporates both the explicit long-range earnings estimate shown in the "box" and the implicit continuous growth rate calculated from the estimates of earnings per share.<sup>iii</sup>

For the Staff's determination of DCF cost of equity, a non-constant DCF growth rate was assumed. Dividends were assumed to grow at a rate derived from financial analysts' growth estimates for the first five years (i.e., long term growth rate). The Staff's DCF growth estimates were used for the first five years, as they are averages of estimates from various investor news services. From the twenty-fifth year on, the growth rate was assumed to equal the long-term growth rate in GNP. For the sixth through twenty-fourth years, dividends vary between the two rates in a linear fashion. The long-term growth rate in GNP was the average annual change in GNP from the U.S. Department of Commerce for 1929 through 2011.<sup>iv</sup>

Based on long-term GNP growth, the respective Company DCF growth estimate and dividend, a stream of annual dividends was calculated. The internal rate of return

---

i Ibbotson Associates 2012 Yearbook: Stocks, Bonds, Bills and Inflation: Valuation Edition  
ii See Staff Schedule D-1.3  
iii See Staff Schedule D1.4  
iv See Staff Schedule D-1.10

derived from the dividend stream and the stock price was used for Staff's non-constant growth DCF cost of equity estimate.

The comparable group non-constant DCF cost of equity estimates average 10.24%. Due to the historically lower Treasury Yields the Staff multiplied the 6.09% CAPM estimate by 25%, and the DCF cost of equity estimate by 75% resulting in a return of 9.16%. Using a one hundred basis point range of uncertainty, the cost of equity estimate becomes 8.66% to 9.66%. To provide for this return, allowance must be made for issuance and other costs, as shown on Schedule D-1.1. This factor was the number Staff recommend in the Company's last rate filing (Case No. 08-709-EL-AIR). This number was used due to the fact that Duke Energy currently has negative retained earnings which would result in a negative issuance cost, which is not possible. Therefore an adjustment factor of 1.019 was applied resulting in a baseline cost of common equity recommendation of 8.82% to 9.84%.



## **RATES AND TARIFFS**

By its application in Case No. 12-1685-GA-AIR, Duke Energy Ohio requests authority to increase rates to be charged and collected for gas service within its service territory.

The Utilities Department Commission Staff has investigated the rate and tariff matters proposed by the Applicant. The results of the Staff's investigation are reported in this section. It is Staff's intent to provide analysis with regard to the acceptability and reasonableness of the changes in revenue recovery mechanisms contained in the proposed tariffs. Proposals made by the Staff may require adjustments based on the revenue and rate structure authorized by the Commission.

Staff's tariff analysis addresses changes specific to individual rate schedules, changes which apply to more than one specific rate class, and tariff additions and deletions. Rate design will analyze the Current, Applicant Proposed and Staff-Recommended mechanisms for rate recovery. Rate and revenue analysis is dedicated to the propriety and impact of the rate schedule proposal. Tables which portray the effects of Current, Proposed, and Staff-Recommended rates on typical bills are presented at the end of the report.

### **TARIFF ANALYSIS**

The Applicant is proposing various textual changes to its tariffs. Unless noted, Staff recommends approval of these changes as proposed by the Applicant. In addition Staff is making recommendations to change certain language to reflect the current Ohio Administrative Code Rules. The proposed changes are provided as follows:

#### **Tariff Page 30 of 167**

Supplement B of Duke's tariff contains a copy of Chapter 4901:1-18 of the Ohio Administrative Code (O.A.C.). Staff recommends that Duke replace Supplement B with the most current version of Chapter 4901:1-18, O.A.C.

#### **Sheet 30.17, page 3 of 3 – Late payment charge:**

The reference in this section to Rule 4901:1-18-04 (B) of the O.A.C. is incorrect. Staff recommends that Duke replaces its current reference with a reference to "Rule 4901:1-18-15 (C) of the Ohio Administrative Code".

**Sheet No. 33.14 – Residential Firm Transportation Service:**

**Availability**

The last paragraph in this section cites Rule 4901:18-04 (B) of the O.A.C. as the reference to the payment plan known as “Percentage of Income Payment Plan” or “PIPP”. Staff recommends that Duke correct this citation to reference Rule 4901:1-18-12 of the O.A.C.

**Sheet No. 82.5 – Charge for Reconnection of Service:**

The Company is proposing a new provision to this section of its tariff. The new provision would require customers who request to have service disconnected and then reconnected at the same premise within an eight month period to pay “...*the equivalent to the appropriate billing of the customer’s Fixed Delivery Service Charge for the number of billing periods the service was disconnected, including any necessary prorated charges representing partial bill periods (s).*”<sup>i</sup>

Staff believes that levying such a charge has the effect of requiring customers to pay for services they did not receive and covers a period of time when they were not even Duke’s customers. According to the direct testimony of William Don Wathen Jr. “*It is the availability of the gas distribution service that causes the cost.*”<sup>ii</sup> If the Commission approves Duke’s requested change to its tariff, then a landlord, who for example, disconnects service for safety reasons when their property is vacant, would be required to pay for “the availability of gas service” during a period when they have requested to turn the gas off; a common occurrence. Duke’s territory serves college campuses, off campus housing or multi-unit dwellings all of which could be empty over the summer months. In addition, Staff is concerned that if the argument “the availability of gas distribution service caused the cost” is upheld, Duke could in the future request to expand this charge to those customers who were disconnected for non-payment. For example, if a customer is disconnected in June for non-payment and is unable to find funds to reconnect service until the “Winter Reconnection Order” is issued in mid-October, he/she could also be required to pay for the availability of gas service for the months he/she was disconnected.

---

<sup>i</sup> Schedule E-2.1 Case No. 12-1685-GA-AIR In the Matter of the Application of Duke Energy Ohio, Inc. for an Increase in Gas Rates, at pg. 135 of 138.

<sup>ii</sup> Direct Testimony of William Don Wathen Jr. Case No. 12-1685-GA-AIR In the Matter of the Application of Duke Energy Ohio, Inc. for an Increase in Gas Rates, at pg. 14.

In addition, Duke could not provide data older than two years regarding the number of customers who requested service disconnection followed by reconnection at the same premise; despite the fact their new rate design has been in effect since 2008. Because of this lack of information, Staff cannot determine if this occurrence is trending upward, downward or is a seasonal occurrence regardless of the rate design. If this pattern of requested disconnection followed by reconnection at the same premise is seasonal, the customer count numbers provided by Duke would already have been taken into account as a seasonal fluctuation. The Company's Fixed Delivery Charge is based, in part, on the customer count numbers filed by Duke in this case. The customer count numbers are the 12 month average, meaning it accounts for the lower customer count numbers in the summer months and the higher customer count numbers in the winter months and thus already recovers the costs for seasonal fluctuations. To levy an additional charge for reconnection of service would be redundant. Staff therefore recommends that the Commission reject this proposed provision.

## **RIDERS**

### **Economic Development Incentive Rider (Rider ED)**

The Applicant is proposing Rider ED, Economic Development Incentive Rider. The rider is designed to fund economic development activities and projects to encourage businesses to locate and/or to expand their existing operations in Ohio. The goal of the rider is to collect \$1 Million dollars per year towards this funding. Staff feels that economic development is good, but should be paid for by the Company and its shareholders. Also, the application, as filed, lacks detail as to how the money is spent, and how decisions are made about economic development projects. Therefore, Staff rejects this proposed rider.

### **Facilities Relocation - Mass Transportation Rider (Rider FRT)**

As part of this distribution rate case, Duke Energy Ohio is requesting a new tariff for relocating its facilities, Facilities Relocation - Mass Transportation Rider (Rider FRT), which focuses on recovery of the costs of relocations due to mass transportation projects initiated by governmental subdivisions.

The Company proposes the design of Rider FRT to give the governmental subdivision the option of paying the Company directly for the cost of relocation or, alternatively, to charge only those customers residing within its governmental boundaries for the cost of the project. The charge under either option would be sufficient to pay for the cost of relocating the facilities, plus a carrying charge at the weighted-average cost of capital established in these proceedings.

The Staff does not support the Company's proposal to create Rider FRT. It is Staff's position that Rider FRT, as designed, is not well-defined and too open-ended. Staff does not support Rider FRT for the following reasons:

- Public mass transportation includes various transport services available to the general public including vanpools, buses, trolleybuses, trains and trams, rapid transit, ferries, and their variations. Staff believes that the Company's proposal fails to identify what type of public mass transportation project would be eligible under Rider FRT.
- The Company's proposal does not distinguish between projects that should be funded solely by the governmental subdivision and projects funded solely by the utility in accordance with home rule charter of the Ohio Constitution.
- The Company's proposal does not address the fact that many transportation projects provide various economic, social, and environmental benefits that are realized directly and indirectly. Additionally many mass transportation projects are built in phases and eventually over time connect one geographic area or city to another city or cities. It is unclear if the design of Rider FRT would ensure that the appropriate customers are being charged for the project in accordance with the principles of cost causation and recovery.
- The Company's proposal to have two options for funding mass transportation projects presents confusion. It is not clear as to what point in time, in conjunction with the governmental subdivision's planning and construction stages, the utility will seek Commission approval to utilize the tariff. Additionally, it is not clear how potential cost overruns would be reviewed and/or approved by the Commission.
- It is not clear if granting mass transportation projects to be funded through the option 2 of Company's proposal, or in other words, through a charge on customers' bills, would result in unintended liability and/or legal issues. For instance, under the Company's proposal it is not clear who bears the assessment of future remediation liability.

## **RATE DESIGN AND REVENUE ANALYSIS**

### **Rate and Revenue Guidelines**

General guidelines and objectives are followed in Staff's review of rate schedules and design. The applicable schedules should provide the utility the opportunity of recovering an authorized revenue. The various schedules should represent a reasonable distribution of revenue between and among the various customer groups. The particular schedules should be equitable and reasonable, should provide for customer understanding and continuity of rates, and should cause minimal customer impact.

Rate design criteria are to be viewed as a package, in that they are interrelated. Although each item can be separately identified and applied to rate schedule determinations, no single standard is overriding in determining proper rate design. The rate schedules which comprise a particular utility's tariffs should provide for recovery of expenses found proper in the course of a regulatory proceeding. Normally, and to the extent sufficient information is available, cost of service studies and related expense analyses are necessary to determine the appropriate level of revenue to be generated and the appropriate recovery of such revenue.

From a practicable rate design standpoint, absolute equality between costs and revenues may be difficult to achieve in the short term. While it may be viewed as equitable to set rates at cost, if there is a substantial divergence in the current rates, the resulting impact on individual customers may be viewed as unreasonable. While desiring cost supporting charges, Staff considers such items as resulting typical customer billings and resulting revenue increases which would necessarily occur. These tests help provide benchmarks with regard to reasonableness of charges in rate forms. While it is Staff's position that rate schedules reflect costs, it is also important to consider the continuity associated with current and proposed pricing structures. This may result in movement towards more closely aligning revenue with costs rather than an absolute match at a particular time period.

In summary, gas rates should:

Be predicated on costs

- Be fair, equitable and reasonable
- Cause minimal impact (sometimes called "gradualism") when changed
- Provide continuity in pricing structures
- Provide the utility the opportunity to recover an authorized revenue by providing for the recovery of costs found proper in a regulatory proceeding

The preceding standards are important and each has value. They are, however subjective, and it is generally impossible to fully accomplish them all. Sometimes one standard (the most obvious being that the rates must provide the utility with the opportunity to recover its authorized revenue requirement supersedes, to a degree, the others). Sometimes the standards are in conflict and to accomplish one, another might be set aside (e.g. in this application, the need for rates to be predicated on costs may cause changes in pricing structures resulting in greater than minimal impacts on some customers).

### **Cost of Service Analysis**

Generally, there are three capacity allocations that are commonly used - coincident demand, non-coincident demand, and average and excess demand. The standard filing requirements allow the selection of any of these approaches, or alternatives, when, in the utility's opinion, the procedure best represents the utility's system characteristics.

The Applicant filed a peak and average method allocating cost to the various classes. This method assumes the minimum capacity is necessary to deliver the total gas used and is equal to average daily deliveries. The remainder of the capacity is allocated based upon the difference between the average daily capacity and the peak day capacity. Staff finds the methodology reasonable.

The cost of service study revealed that there are significant differences among rate classes when comparing the actual return earned by each rate class to the 8.13 percent return on rate base being requested in these proceedings. Rate disparities exist mostly due to the fact that over the years, rates have not been set based on the cost to serve customers, as determined by a cost of service study. In order to mitigate the rate shock that may come from eliminating the subsidy/excess (or rate disparities) among the rate classes, the Company is proposing to use a two-step process to distribute the proposed revenue increase. The first step eliminated 15 percent of the subsidy/excess revenues between customer classes based on present values. The second step allocated the rate increase to customer classes based on original cost depreciated (OCD) rate base. Staff agrees with this proposal because it moves the customer classes closer to the average rate of return, while also respecting the principles of gradualism.

### **REVENUE ANALYSIS**

Rates and charges shown in the rate schedule tables may require adjustment based on the revenue requirement granted by the Commission, and/or changes in the rate areas, or changes in rate structure approved by the Commission.

The values include Gas Cost of \$ 5.912 per Mcf.

**TABLE 1**  
**Total Revenue Excluding Gas Cost**

	<b><u>Current</u></b>	<b><u>Applicant Proposed</u></b>	<b><u>Increase</u></b>
<b><u>Residential Service</u></b>	\$121,581,978	\$143,422,326	\$21,840,348
<b><u>General Service</u></b>			
Commercial	17,530,354	18,445,834	\$915,480
<b><u>Industrial</u></b>	<b><u>15,349,014</u></b>	<b><u>17,044,193</u></b>	<b><u>\$1,695,179</u></b>
<b>Total General Service</b>	<b>32,879,368</b>	<b>35,490,027</b>	<b>\$2,610,659</b>
<b><u>Transportation Service</u></b>			
Residential Transportation	53,754,703	69,237,557	\$15,482,854
Firm Transportation	40,673,748	45,751,849	\$5,078,101
<b><u>Interruptible Transportation</u></b>	<b><u>13,671,989</u></b>	<b><u>15,449,285</u></b>	<b><u>\$1,777,296</u></b>
<b>Total Transportation Service</b>	<b>108,100,440</b>	<b>130,438,691</b>	<b>\$22,338,251</b>
<b>Sub total</b>	<b>\$262,561,786</b>	<b>\$309,351,044</b>	<b>\$46,789,258</b>
<b>Misc. Revenue</b>	<b>4,641,436</b>	<b>4,641,436</b>	<b>\$0</b>
<b>Total</b>	<b>\$267,203,222</b>	<b>\$313,992,480</b>	<b>\$46,789,258</b>

**TABLE 2**  
**Total Revenue Including Gas Costs and Miscellaneous Expenses**

	<b>Current</b>	<b>Applicant Proposed</b>	<b>Increase</b>
<b>Residential Service</b>	\$247,182,527	\$269,022,875	\$21,840,348
General Service			
Commercial	27,385,553	28,301,033	\$915,480
Industrial	44,020,703	45,715,882	\$1,695,179
Total General service	71,406,256	74,016,915	\$2,610,659
Transportation Service			
Residential Transportation	53,754,703	69,237,557	\$15,482,854
Firm Transportation	40,673,748	45,751,849	\$5,078,101
Interruptible Transportation	13,671,989	15,449,285	\$1,777,296
Total Transportation Service	108,100,440	130,438,691	\$22,338,251
Sub total	\$426,689,223	\$473,478,481	\$46,789,258
Misc. Revenue	4,641,436	4,641,436	\$0
<b>Total</b>	<b>\$431,330,659</b>	<b>\$478,119,917</b>	<b>\$46,789,258</b>

**TABLE 3**  
**Total Revenue Excluding Gas Cost**

<b>Residential Service</b>	45.50%	45.68%
General Service		
Commercial	6.56%	5.87%
Industrial	5.74%	5.43%
Total General Service	12.31%	11.30%
Total Transportation Service	40.46%	41.54%
Subtotal	98.26%	98.52%
Miscellaneous Rev.	1.74%	1.48%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>



**TABLE 4**  
**Total Revenue Including Gas costs and Miscellaneous Revenue**

	Current	Applicant Proposed
Residential Service	57.31%	56.27%
General Service		
Commercial	6.35%	5.92%
Industrial	10.21%	9.56%
Total General Service	16.55%	15.48%
Total Transportation Service	25.06%	27.28%
Sub total	98.92%	99.03%
Miscellaneous Revenue	1.08%	0.97%
Total	100.00%	100.00%

## RATE DESIGN

Staff has traditionally recommended and supported a rate design for the natural gas distribution component consisting of a minimum customer charge and a volumetric rate or blocks of rates. That structure, while not truly cost effective, sufficed to allow the utility the opportunity to recover the recommended revenue requirement as long as gas consumption remained level or increased. In recent years, due primarily to the volatile and relatively high cost of gas (to be recovered through the Gas Cost Recovery mechanism), the trend of gradually increasing gas consumption, per customer, has been reversed. Therefore, Duke, and other gas utilities, have seen the recovery of distribution costs deteriorate as the volume of gas used decreased.

Rather than recovery via a minimal customer charge and relatively high volumetric rates, Staff recommends that the Commission approve the Company's proposed rate structure primarily based on a fixed distribution service charge. In reality, most distribution-related costs are fixed. The distribution facilities required to serve a small residence are most likely the same as those required to serve a larger residence. The distribution facilities required to serve a minimum number of gas appliances in a residential unit are most likely the same as those required to serve a residence with multiple gas appliances. The costs to the utility vary only slightly, if at all, by the volume of gas used.

In addition to a better reflection of cost causation, the primarily fixed-charge-based rate structure accomplishes other rate objectives. It levelizes the distribution component of a customers' bill, providing rate certainty. It reduces the revenue deterioration of a utility in a time of reduced consumption; thus, reducing the need for frequent rate cases. It alleviates the need for a decoupling mechanism which requires frequent controversial reconciliations and weather adjustments. From the Company's point of view, it eliminates its natural disincentive to promote energy conservation which, when rates are volume-based, causes revenue erosion.

Staff is keenly aware, however, of the pitfalls of this significant change in the design of rates. The biggest negative impact being that the change from a primarily volume-based rate to a primarily fixed charge rate often results in large price increases to low use customers (or, if the fixed charge is "blocked", to the lower use customers in the block). A second disadvantage is that the fixed charge structure reduces the incentive on the part of the customer to reduce its usage. Staff, however, finds that this argument is much less relative in the case of distribution rates. The distribution portion of the customer's bill is relatively small compared to the total bill. The cost of gas to be recovered through the Gas Cost Recovery mechanism will continue to serve as the incentive to a customer to keep its usage to a minimum. Finally, the current rate schedules are designed as "residential" or "general service" in nature. General service customers are much less homogeneous than residential customers and a simple fixed charge may not be the appropriate cost recovery mechanism.

With all these changes in mind, Staff recommends approval of the Applicant's proposed rate design featuring the change from a primarily volumetric rate to a primarily fixed charge rate. The following table illustrates this concept.

**TABLE 5**  
**Billing Determinates Table**

	<b>Current</b>	<b>Applicant Proposed</b>
<b>Residential Service</b>		
Fixed Delivery Service Charge	\$25.33	\$33.03
<b>Usage Based Charge</b>		
First 400 CCF	0.32728	1.304768
Additional CCF	0.97278	3.890974
<b>General Service-Small</b>		
Annual CCF <=4000 CCF		
Fixed Delivery Service Charge	\$45.00	\$91.64
<b>Usage Based Charge</b>		
Annual Usage <=4000 CCF	0.99452	1.543704
<b>General Service-Large</b>		
Annual CCF > 4000 CCF		
Fixed Delivery Service Charge	\$180.00	\$226.64
<b>Usage Based Charge</b>		
Annual Usage > 4000 CCF	1.0483	1.39784

### **Staff Discussion and Recommendation**

It is apparent that there are a significant number of residential and general service accounts that use such small volumes of gas that it is likely that the usage is for something other than space or water heating. Staff is very mindful of these customers, but from a cost causation viewpoint, these customers are no different than any other customers. Staff recommends that the Applicant work with these customers to notify them that, in the future, they may see significant increases simply by taking limited service.

Finally, it is likely that the traditional “residential/general service” schedules may not be the appropriate mechanisms to reflect cost causation through rates. A more appropriate mechanism for rate differentials may be a more “facilities-based” approach. Staff recommends that the Commission require the Applicant to perform an analysis addressing this issue. If the analysis indicates a change is appropriate, the Applicant should so reflect that change in its next distribution rate case.

#### **Rate IT – Interruptible Transportation Service**

Staff is not proposing any changes to the Applicant’s proposed rate structure for interruptible customers.

#### **TYPICAL BILLS**

Monthly typical bills are shown in E-5 Schedules at the end of this report. Calculation of typical bills uses a gas cost of \$5.912 per Mcf.

## MANUFACTURED GAS PLANT EXPENSE RECOVERY INVESTIGATION

### Introduction

In its Application in this case, Duke Energy Ohio (Duke) is seeking recovery of approximately \$65.3 million in deferred actual and projected costs for environmental investigation and remediation at two former manufactured gas plants (MGP) located in its natural gas service area. Duke acknowledges that manufactured gas production at both sites ceased in the early- to mid-1960s, but it maintains that under federal and state environmental laws, as the current owner of the sites and as a direct successor company to the company that formerly owned and operated the MGPs, it is responsible for environmental clean-up of both sites. Duke claims that the MGP remediation costs arise from statutorily imposed obligations and, as such, are necessary and ongoing expenses incurred in the provision of utility service and properly recoverable in natural gas distribution rates.<sup>i</sup> Duke states that, once environmental investigations began at the former MGP sites, in Case No. 09-712-GA-AAM, it sought and was granted permission by the Commission to modify its accounting procedures to defer the environmental investigation and remediation costs for potential recovery in a future base rate case.<sup>ii</sup> Duke states that it is now seeking recovery of approximately \$45.3 million in deferred actual remediation costs incurred between January 1, 2008 through March 31, 2012, \$15.0 million in projected remediation costs for the period April 1, 2012 through December 31, 2012, and approximately \$5.0 million in carrying costs. Duke proposes to amortize recovery of the approximate \$65.3 million in total MGP remediation costs over a three-year period. Thus, it recommends an approximate \$21.77 million increase to its annual operating expenses as shown on Company Schedule C-3.2.

### Background

MGPs were prevalent between from approximately 1850 to 1950 and were used for the production of commercial grade gas from the combustion of coal, oil, and other fossil fuels. The MGP gas produced was used primarily for lighting, heating, and cooking and, after natural gas became prevalent, for peak shaving.<sup>iii</sup> By 1970, almost all utility-owned

---

<sup>i</sup> Duke response to Staff DR 95-001, October 12, 2012.

<sup>ii</sup> Duke Application in Case No. 09-712-GA-AAM, *In the Matter of the Application of Duke Energy Ohio, Inc. for Authority to Defer Environmental Investigation and Remediation Costs*, August 10, 2009 at 2 (2009 Deferral Application Case).

<sup>iii</sup> Direct Testimony of Jessica L. Bednarcik on Behalf of Duke Energy Ohio, Inc. Case No. 12-1685-GA-AIR, et.al. In the Matter of the application of Duke Energy Ohio Inc., for an Increase in Gas Rates, July 20, 2102, at 4 and Attachment JLB-1. (Duke Witness Bednarcik Direct Testimony)

or – operated MGPs had been taken out of service nationwide.<sup>i</sup> The remnants of the former MGP sites could include subsurface structures and associated residuals, such as coal tar, scrubber waste, chemicals, and holding tanks.<sup>ii</sup>

At issue in this case is recovery of environmental investigation and remediation costs to clean up the two former MGP sites formerly owned and operated by Duke predecessor companies. According to Duke, its West End former MGP site is located on the west side of downtown Cincinnati and it was constructed by the Cincinnati Gas Light and Coke Company in 1841. Gas for lighting was first produced at the plant in 1843.<sup>iii</sup> The East End former MGP site is located about four miles east of downtown Cincinnati. Construction of this MGP began in 1882 and commercial operations began in 1884.<sup>iv</sup> Duke notes that throughout their operating lives modifications were made at both locations and that manufactured gas production ceased at both plants when natural gas was brought to Cincinnati. However, production at both plants resumed in 1918 in order to supplement the natural gas supply during peak demand periods.<sup>v</sup> The Company states that, according to its records, manufactured gas operations ended at the East End plant in 1963 and at West End in 1967.<sup>vi</sup> After the plants closed, the above ground equipment used to produce manufactured gas and most of the associated structures were removed from both former MGP sites, however several below ground structures and related residuals remained. Duke states that the remaining equipment included remnants of gas holders, oil tanks, tar wells or ponds, purifiers, retorts, coal storage bins, and generator houses<sup>vii</sup> along with associated residuals such as coal tar, scrubber waste, and other chemicals.

Duke maintains that it is liable under state and federal laws for remediation of both former MGP sites and that its liability is governed in Ohio by the Ohio Environmental Protection Agency (OEPA) under Ohio Revised Code Chapter 3746 and associated rules promulgated by OEPA and codified in 3745-300-01 through 3745-300-14 of the Ohio Administrative Code.<sup>viii</sup> Duke states that it initiated the environmental investigation and remediation at the former MGP sites due to changing conditions at the sites that

---

<sup>i</sup> Direct Testimony of Andrew C. Middleton, PhD. On Behalf of Duke Energy Ohio, Inc. Case No. 12-1685-GA-AIR, et.al. In the Matter of the application of Duke Energy Ohio, Inc. for an Increase in Gas Rates, July 20, 2102, at 4. (Duke Witness Middleton Direct Testimony).

<sup>ii</sup> 2009 Deferral application, at 2.

<sup>iii</sup> Duke Witness Bednarcik Direct Testimony, at 5.

<sup>iv</sup> Id.

<sup>v</sup> Id.

<sup>vi</sup> Id.

<sup>vii</sup> Id., at 6.

<sup>viii</sup> Id., at 6-7. In an interview conducted by the Staff on October 18, 2012, Company personnel stated that Duke was not directly mandated by any State or federal agency to clean up either of the former MGP sites and that there is no formal order by any such agencies requiring clean-up of the sites.

could have led to new exposure pathways.<sup>i</sup> At the East End site, Duke indicates that planned residential development of properties adjoining the site would have changed controls at the site that had previously limited the access to the site and potentially contaminated soil.<sup>ii</sup> At the West End site, potential exposure pathways changed due to planned construction of a new highway bridge spanning the Ohio River at a portion of the site. The plans for the new bridge will necessitate Duke moving a large electric substation, transformer bay, underground and transmission lines and replacing a transmission tower.<sup>iii</sup> Duke maintains that construction of the new bridge as well as relocation of the existing electric transmission facilities will disturb existing surface caps over potentially impacted material, thereby increasing exposure risks.<sup>iv</sup>

On August 10, 2009, Duke applied to the Commission in Case No. 09-712-GA-AAM for authority to modify its accounting procedures in order to defer for potential future recovery the costs, including carrying costs, associated with the environmental investigation and remediation of the East End and West End former MGP sites. Via a Finding and Order (F&O) issued in the case on November 12, 2009, the Commission authorized Duke to modify its accounting procedures in order to defer the MGP remediation costs. However, the Commission noted that, "By considering this application, the Commission is not determining what, if any, of these costs may be appropriate for recovery in Duke's distribution rates."<sup>v</sup> Further, the Commission reemphasized this point in its January 7, 2010 Entry on Rehearing in the case. The Commission stated that, "...our approval of Duke's application in this case is not a determination of what, if any, of these [environmental investigation and remediation] costs may be appropriate for recovery in Duke's distribution rates. When, and if, Duke requests authority to recover the costs incurred, the Commission will review the request and make the necessary determinations regarding recovery at that time."<sup>vi</sup>

### **Duke's Environmental Investigation and Remediation at the former MGP Sites**

Duke indicates that OEPA regulations permitted the investigation and remediation work to be broken up into zones or "Identified Areas" (IAs), therefore it segregated the East End site into three IAs and the West End site into multiple IAs.<sup>vii</sup> Duke's description of the investigation and remediation work at the East End and West End sites is summarized below.

---

<sup>i</sup> Id., at 8

<sup>ii</sup> Id.

<sup>iii</sup> Id.

<sup>iv</sup> Id. at 8-9.

<sup>v</sup> Commission response a Motion to Dismiss filed by the Ohio Partners for Affordable Energy pointing out that deferrals do not constitute ratemaking in the 2009 Deferral Application Case, Finding and Order, November 12, 2009, at 3.

<sup>vi</sup> 2009 Deferral Application Case, Entry on Rehearing, January 7, 2010, at 5.

<sup>vii</sup> Id., at 15.

## East End

Duke maintains that the East End site is currently used as a gas operations center and that a portion of the property is used by the Gas Department's Construction and Maintenance Division for offices, storage, and staging of equipment.<sup>i</sup> It states that soil and groundwater tests on the eastern and western portions of the site were conducted between 2007 and 2009.<sup>ii</sup> The Company also states that it conducted risk assessments to determine the potential risk to human health arising from contact with impacted soil or inhalation of fugitive dust.<sup>iii</sup> In 2009, the Company developed a Remedial Action Plan to address potential health and environmental impacts associated with Oil-Like Material (OLM) and Tar-Like Material (TLM) found at the site.<sup>iv</sup> For the western portion of the site, the Company utilized vibration monitors to regulate work in order to protect critical facilities and employed an elaborate retention and bracing systems to excavate and remove impacted soil to a depth of approximately 40 feet on about half of the area.<sup>v</sup> The other half of the western area was excavated to a depth of approximately 20 to 40 feet.<sup>vi</sup> At the eastern portion of the East End site, the Company utilized a large diameter auger to mix the impacted soil with a combination of Portland cement and ground blast furnace slag to a depth of approximately 20 feet in order to bind up the OLM and TLM and solidify it in place in order to prevent future leaching and migration (a process the Duke terms "in-situ solidification" or "ISS").<sup>vii</sup> It also excavated and replaced impacted soil for other segments of the eastern portion. Duke states that excavation activities were completed on the western portion in 2011 and that solidification and excavation at the eastern portion occurred between 2011 and 2012.<sup>viii</sup> It also indicates that groundwater monitoring will recommence in 2012 for both the eastern and western portions of the site. Potential future remediation activities will depend on the results of the monitoring.<sup>ix</sup> The Company also indicates that excavation and ISS activities are planned in 2013 for an abandoned road between the eastern and central portions of the site and that remediation in the central portion may be necessary further in the future.<sup>x</sup>

---

<sup>i</sup> Duke Witness Bednarcik Direct Testimony, at 8.

<sup>ii</sup> Id., at 10.

<sup>iii</sup> Id., at 11.

<sup>iv</sup> Id.

<sup>v</sup> Id., at 11-12

<sup>vi</sup> Staff interview of Duke Witness Bednarcik, October 18, 2012

<sup>vii</sup> Duke Witness Bednarcik Direct Testimony, at 13.

<sup>viii</sup> Duke Witness Bednarcik Direct Testimony, at 14.

<sup>ix</sup> Id., at 18.

<sup>x</sup> Id.



## Land Purchase

Duke reports that it purchased property that had been aggregated from a set of smaller properties on the west side of the East End site in May 2011.<sup>i</sup> The property was primarily a former residential neighborhood. A private developer had assembled the properties for a planned residential development. The Company maintains that it purchased the land because investigations had shown that there were MGP impacts at the western boundary of the East End site where it adjoined the developer's property. Therefore, the property west of the site was likely impacted as well.<sup>ii</sup> The Company states that an investigation in 2011 indicated MGP impacts on the acquired land and that more tests were planned in 2012.<sup>iii</sup> Duke states that as the entity responsible for cleaning up the impacts at what was the developer's property and to minimize its future liability, a decision was made to purchase the land from the developer.<sup>iv</sup> The Company further states that it purchased the land for \$4,500,000 and that the \$2,331,580 included for recovery in its Application represents the amount over and above the fair market value of the land that Duke had to pay in order to acquire the property.<sup>v</sup> Duke computed the portion of the land purchase that was deferred for recovery as follows:

$$(\text{Purchase Price of } \$4,500,000) - (\text{Appraised Value of } \$2,159,000) - (\text{Title Service of } \$9,420) = (\text{Deferred MGP Value of } \$2,331,580)^{\text{vi}}$$

## West End

Duke states that it uses the remaining structures from the 1916 former electric generating station for storage of electric equipment and relays. It also states that the site has two large electric substations, transformer bays, and a number of electric transmission towers.<sup>vii</sup> The site also has a gas pipeline and meter house located on the southeastern section of the site east of the I-75/71 bridge. The Company indicates that, until January 2011, a parking lot was located on the northern portion of the site (north of Mehring Way) that was used by Duke employees working in numerous Company divisions, such as the service company, electric distribution, gas distribution, electric transmission, etc.<sup>viii</sup> The Company reports that remediation at the West End site was divided into multiple IAs and two principal phases. Phase 1 was an area south of Mehring Way between the two electric substations and Phase 2 occurred in the area of

---

<sup>i</sup> Duke response to Staff DR 127-001, November 5, 2012, at 1.  
<sup>ii</sup> Duke Witness Bednarcik Direct Testimony, at 14-15.  
<sup>iii</sup> Id., at 15.  
<sup>iv</sup> Staff interview of Company personnel, October 18, 2012.  
<sup>v</sup> Id.  
<sup>vi</sup> Duke response to Staff DR 127-003, November 5, 2012, at 1.  
<sup>vii</sup> Duke Witness Bednarcik Direct Testimony, at 7.  
<sup>viii</sup> Staff interview of Company personnel, November 15, 2012

the former parking lot north of Mehring Way.<sup>i</sup> The Company states the majority of the environmental testing for both phases occurred in the first half of 2010 and that actual remediation commenced in 2011.<sup>ii</sup> Remediation for both phases consisted of a combination of excavation and ISS to a depth of approximately 20 feet.<sup>iii</sup> The Company reports that remediation for Phase 1 and Phase 2 continued into 2012 and that excavation and ISS for Phase 2A (north of Mehring Way and west of Phase 2) will also occur in 2012.<sup>iv</sup> Other areas at the site could also be remediated depending on the results of groundwater testing that was planned to recommence in 2012 and any impacts discovered with movement of electric transmission equipment and towers to accommodate the I-75/71 bridge project.<sup>v</sup>

### **Duke's Proposed Environmental Investigation and Remediation Costs and Recovery**

As noted above, Duke proposes to recover approximately \$45.3 million in deferred remediation costs incurred between January 1, 2008 through March 31, 2012, \$15.0 million in projected costs for the period April 1, 2012 through December 31, 2012, and a total of approximately \$5.0 million in carrying costs. The precise amounts that Duke proposes to recover broken out by the East End and West End sites, year, and cost categories identified by Duke on its Schedule WPC-3.2b are shown on Figures 1 and 2 below. In addition, Duke's proposed actual and projected carrying costs amounts are shown in Figure 3.

---

<sup>i</sup> Duke Witness Bednarcik Direct Testimony, at 15-16.  
<sup>ii</sup> Id., at 16.  
<sup>iii</sup> Id.  
<sup>iv</sup> Id., at 16-17.  
<sup>v</sup> Id., at 18.

<b>Actual Remediation Costs Incurred by Duke Thru March 31, 2012</b>					<b>Figure MGP-1</b>
	<b>12 months ended</b>				<b>3 month ended</b>
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>East End</b>	\$	\$	\$	\$	\$
Investigation	300,768	383,986	4,601	0	0
Air Monitoring	0	0	350,243	444,319	40,328
Security	0	0	56,706	95,353	2,269
Analytical Laboratory	0	47,630	187,212	428,148	63,853
Contractor Support	0	0	0	15,473	2,677
Construction Mgmt./Detailed Design	0	0	6,131,600	9,114,817	1,317,027
Vibration Monitoring	0	0	211,671	170,980	12,915
Fuel	0	0	0	106,237	1,098
Miscellaneous	0	3,763	28,182	44,654	12,183
Soil Disposal/Landfill	0	15,022	1,088,571	1,628,895	2,543
Duke Internal Expenses	10,357	13,336	83,135	52,459	3,773
Duke Laboratory Labor	0	8,405	33,037	77,476	4,366
Duke EHS Audit Team	0	0	0	4,073	0
Duke Gas Oversight	0	0	0	10,911	0
Duke Internal Surveying	0	0	56,348	109,391	0
Duke MGP PM/Construction Oversight	26,635	56,789	178,322	153,962	25,001
Account Accruals	0	25,343	(25,343)	9,295	1,244
<b>East End Yearly Totals</b>	<b>337,759</b>	<b>554,272</b>	<b>8,384,286</b>	<b>12,466,442</b>	<b>1,489,276</b>
Property Purchase	0	0	0	2,331,580	4,880
Journal Entries	0	0	(20,776)	20,729	46
<b>West End</b>					
Investigation	0	0	548,384	0	0
Air Monitoring	0	0	83,702	259,451	61,170
Security	0	0	0	3,826	0
Analytical Laboratory	0	0	183,237	143,616	86,028
Contractor Support	0	0	0	12,142	1,636

Actual Remediation Costs Incurred by Duke Thru March 31, 2012					Figure MGP-1 (Cont.)
Construction Mgmt./Detailed Design	0	0	186,275	10,202,687	3,540,391
Vibration Monitoring	0	0	1,334	8,028	0
Fuel	0	0	0	166,298	66,420
Miscellaneous	1,120	225	12,853	498,826	26,715
Soil Disposal/Landfill	0	0	21,884	2,866,547	93,728
Duke Internal Expenses	0	727	17,719	52,040	20,751
Duke Laboratory Labor	0	0	32,336	29,143	5,197
Duke EHS Audit Team	0	0	0	5,949	0
Duke Power Delivery Oversight	0	0	73,317	25,464	0
Duke Internal Surveying	0	0	37,292	15,976	0
Duke MGP PM/Construction Oversight	0	26,167	74,838	125,895	50,309
Account Accruals	0	0	0	(5,381)	53,547
<b>West End Yearly Totals</b>	<b>1,120</b>	<b>27,118</b>	<b>1,273,173</b>	<b>14,410,507</b>	<b>4,005,891</b>
<b>Ohio MGP Yearly Totals</b>	<b>338,879</b>	<b>581,391</b>	<b>9,636,683</b>	<b>29,229,258</b>	<b>5,500,094</b>
<b>Total Actuals 2008 thru March 2012</b>					<b>45,286,305</b>

<b>Estimated Remediation Costs to be Incurred by Duke from April 1 thru December 31, 2012</b>		<b>Figure MGP-2</b>
	<b>April thru December 2012</b>	
<b>East End</b>	<b>\$</b>	
Investigation	0	
Air Monitoring	154,545	
Security	504	
Analytical Laboratory	81,251	
Contractor Support	10,499	
Construction Management/Detailed Design	1,008,782	
Vibration Monitoring	64,575	
Fuel	16,222	
Miscellaneous	30,932	
Soil Disposal/Landfill	251,444	
Duke Internal Expenses	9,064	
Duke Laboratory Labor	7,276	
Duke EHS Audit Team	0	
Duke Gas Oversight	0	
Duke Internal Surveying	0	
Duke MGP PM/Construction Oversight	86,983	
Account Accruals	(3,513)	
<b>East End 9 Month Estimated Totals</b>	<b>1,718,564</b>	
Property Purchase	0	
Journal Entries	22,358	

Estimated Remediation Costs to be Incurred by Duke from April 1 thru December 31, 2012		Figure MGP-2 (Cont.)
<b>West End</b>		\$
Investigation		0
Air Monitoring		211,185
Security		0
Analytical Laboratory		222,064
Contractor Support		10,621
Construction Management/Detailed Design		11,663,652
Vibration Monitoring		0
Fuel		176,405
Miscellaneous		69,254
Soil Disposal/Landfill		743,867
Duke Internal Expenses		59,069
Duke Laboratory Labor		16,987
Duke EHS Audit Team		0
Duke Power Delivery Oversight		0
Duke Internal Surveying		0
Duke MGP PM/Construction Oversight		143,835
Account Accruals		(57,861)
<b>West End 9 Month Estimated Totals</b>		<b>13,259,078</b>
<b>Ohio MGP 9 Month Estimated Cost Totals</b>		<b>15,000,000</b>

Duke Energy Ohio MGP Carrying Costs					Figure MGP-3
	12 months ended				3-mo. ended
	2008	2009	2010	2011	2012
	\$	\$	\$	\$	\$
<b>Actual Carrying Costs by Year</b>	<b>10,970</b>	<b>42,503</b>	<b>287,158</b>	<b>1,413,610</b>	<b>699,021</b>
<b>Total Actuals 2008 thru March 2012</b>					<b>2,453,262</b>
					<b>Apr - Dec 2012</b>
					<b>\$</b>
<b>Estimated Carrying Costs for April - December</b>					<b>2,593,850</b>
<b>Total Ohio MGP Carrying Costs (Actuals + Estimated)</b>					<b>5,047,112</b>

Duke proposes to amortize its proposed total MGP remediation costs over a three-year period. Thus, on Schedule WPC-3.2a it divides the total proposed \$65,333,417 remediation costs by three to arrive at \$21,777,806 in annual MGP remediation expenses that it includes in its test year expenses in this case.

### Staff's Investigation

To investigate Duke's proposed MGP investigation and remediation expenses, the Staff reviewed Company responses to several Staff data requests, examined the Company's accounting records, reviewed Company-supplied site drawings and current and historical aerial photographs of the sites, and conducted several on-site inspections. The purposes of the Staff's investigation were to ascertain the reasonableness of the proposed expenses, determine if the proposed expenses are recoverable in natural gas distribution rates under the Commission's rate-making formula, verify invoices and payments for remediation activities, and ensure that the Company's books and accounts are a reliable source of cost data. The Staff's determination of the reasonableness of the MGP-related expenses was limited to verification and eligibility of the expenses for recovery from natural gas distribution rates. The Staff did not investigate or make any finding or recommendations regarding necessity or scope of the remediation work that Duke performed. For example, the Staff offers no opinion as to whether ISS might have been adequate and less costly than excavation and soil replacement in a particular area or that excavation to a depth of 35 feet was sufficient to address MGP impacts as opposed to the 40 feet that Duke determined.

## **Staff's Findings and Recommendations**

After viewing aerial photographs and visiting both former MGP sites, the Staff believes that the property sub-areas (also called identified areas or Phases by the Company) that Duke used to divide up and track the remediation work at both sites are logical and provide useful references for describing the sites. Therefore the Staff describes its findings and recommendations related to both sites by the identified sub-areas at each site. (Attachments MGP-1 – MGP-4 appended to this report section show recent and historic aerial photographs of the East End and West End sites.)

### **East End**

#### **Eastern Parcel**

The Eastern Parcel is comprised of the area bounded by the Ohio River to the south, Riverside Drive to the north, Corbin Street to the east, and the eastern edge of abandoned Pittsburgh Street to the west (which provides access to and is considered part of the Central Parcel). Visual inspection of the parcel revealed it to be a vacant field without any visible permanent structures except for a boundary fence. Similarly, historical aerial photographs of the parcel going back to 2005 and beyond show that the site was an empty field. (See the area labeled "Eastern Parcel" on Attachments MGP-1 and MGP-2) During Staff site visits and in response to Staff Data Requests, the Company reported and identified in drawings three 20 to 24 inch underground gas mains that transverse the parcel to serve the propane injection facility and city-gate located at the Central Parcel. Based on the Staff's inspections and review of documents provided by the Company, the Staff concludes that the only areas of the parcel that are used and useful for providing natural gas distribution service are the areas that provide access to the underground natural gas pipelines and the pipelines themselves. Therefore, the Staff recommends that the Company should only be permitted to recover MGP remediation expenses incurred for land 25 feet on each side of the centerline of the gas pipelines, thus providing a total 50-foot buffer around the pipelines. The Staff believes that 50 feet is a reasonable right of way for pipelines of the size and operating pressure of those located at the Eastern Parcel. The total 50-foot buffer (25 feet on each side) allows access and room to turn heavy equipment that could be used to maintain or repair the pipelines. The buffers recommended by the Staff are shown as shaded areas within the Eastern Parcel on Attachment MGP-5. Reflecting the Staff's findings regarding the areas of the parcel were not used and useful in providing natural gas service on the date certain, the Staff also made corresponding adjustments to the Company's plant in-service balance in the Company's plant accounts.



### Central Parcel

The Central Parcel is the area bounded by the western edge of the Eastern Parcel to the east, the Ohio River to the South, Riverside Drive to the north, and the eastern edge of the Western Parcel to the west. The Central Parcel includes all of the abandoned Pittsburgh Street on the east and the entire abandoned segment of St. Andrews Street to the west as access points to the facilities located at the Parcel. The Staff's inspections and review of aerial photographs and Company-supplied documents revealed active natural gas operations at the entire Central Parcel. Gas operations in-service at the parcel include a propane injection facility (with propane/air vaporizers and other related equipment), a city-gate transfer point between Duke Energy Kentucky and Duke Energy Ohio, meeting facilities, a field operations center for field personnel, materials storage for field construction activities, and an equipment parking and staging areas. (See Attachments MGP-2 and MGP-6.) The Staff concludes that the entire Central Parcel was both used and useful for providing natural gas distribution service on the date certain in this case, thus MGP remediation expenses incurred at the parcel should be eligible for recovery from natural gas customers.

### Western Parcel

The Western Parcel is the area bounded by the western edge of abandoned St. Andrews Street to the east (which is the eastern edge of the Central Parcel), the Ohio River to the South, Riverside Drive to the north, and to the west by the newly acquired land that Duke purchased in 2011. The Staff's inspections and review of aerial photographs and site drawings of the parcel reveal that, until very recently, the parcel was vacant with no above-ground structures and no underground gas mains that serve the gas operations situated on the Central Parcel (see area labeled "Western Parcel" on Attachments MGP-1 and MGP-2). In 2012, the Company began construction of new vaporizers for its propane facility near the northeast corner of the parcel near the current vaporizers. However, the new vaporizers were not in operation during the Staff's site inspections and were not in operation on the date certain in this case. The Staff concludes that none of the remediation expenses at the Western Parcel were incurred to operate, maintain, or repair natural gas plant that was in-service and used and useful at the date certain except for expenses incurred in a small area in the northeast corner of the parcel. The National Fire Protection Association (NFPA) Code establishes minimum set-back requirements for liquid gas vaporizers and gas-air mixers.<sup>1</sup> Thus, the Staff believes that the land within 50 feet of the existing vaporizer building, as called for by the NFPA Code, is used and useful. The buffer around the Vaporizer Building that

---

<sup>1</sup> NFPA® 59 Utility LP-Gas Plant Code 2012 Edition.

Staff is recommending is shown on Attachment MGP-7. Given these findings, Staff recommends that none of the MGP remediation expenses incurred at the Western Parcel should be recoverable in natural gas distribution rates except for those incurred within the required 50-foot buffer around the existing Vaporizer Building. Consistent with this recommendation, the Staff made appropriate adjustments to the Company's plant in-service balance to remove the unproductive areas of parcel from the Company's plant accounts.

#### Purchased Property

The Purchased Property is bounded to the east by the western edge of the Western Parcel, to the south by the Ohio River, to the north by Riverside Drive, and to the west generally by Gotham Place, except for five parcels situated on the west side of Gotham Place. Based on site inspections and review of recent and historical aerial photographs and Company supplied documents, the purchased land was historically a residential neighborhood that was never part of the former East End MGP site. The land now is a large vacant field with no visible structures or underground facilities that are used and useful in providing natural gas distribution service to customers. A 2012 aerial view of the Purchased Property can be seen in Attachment MGP-2. Attachment MGP-8 shows a drawing of the Purchased Property with the former individual property plats shown. Essentially, Duke is requesting to recover from customers the premium it paid to the developer so that it could purchase the land in order to protect itself from future liability arising from the presence of MGP impacts. The Staff recommends that none of the deferred expense associated the land purchase should be recovered from customers.

#### Other Infrastructure

There is sensitive infrastructure located at the East End site that is currently used and useful for providing natural gas distribution service to customers. The Staff recommends that MGP remediation expenses associated with this infrastructure should be recoverable from natural gas customers. Therefore, the Staff included such expenses in its recommended amount that Duke should recover for MGP expenses. However, the details of its calculation of the expenses recommended for recovery are confidential due to safety and security concerns associated with the sensitive infrastructure.

West End

North of Mehring Way

Is a parcel bounded to the south by Mehring Way, to the north by Pete Rose Way, to the east by Rose Street, and to the west by Gas Alley. Much of the parcel was formerly an employee parking lot that, as noted above, was used by Duke employees from multiple functional areas within the Company. The parcel also included a multi-purpose building that was not used for utility service, and electric transmission towers (see Attachment MGP-3). The parking lot and multi-purpose building were removed for the remediation work and have not been replaced. The parcel now is mostly compacted gravel devoid of any permanent structures except for the electric transmission towers (see Attachment MGP-4). Remediation activities were in-progress in the western third of the parcel during the Staff visits. The Company estimates that this work will be completed in July 2013.<sup>i</sup> After reviewing site drawings provided by the Company and conducting several site inspections, the Staff concludes that there were no facilities at the North of Mehring Way parcel that were used and useful for providing natural gas service to customers at the date certain in this case (see Attachment MGP-9). As a result, the Staff recommends that Duke should not be permitted to recover any operation or maintenance expenses incurred during remediation activities on the parcel. The remediation O&M expenses incurred were not related to the operation, maintenance, or repair of natural gas plant in-service, therefore they should not be recovered in natural gas distribution rates.

South of Mehring Way

This parcel is bounded to the north by Mehring Way, to the south by the Ohio River, to the east by property owned by Hilltop Basic Resources that is used for asphalt and concrete plants, and coal facilities owned by the University of Cincinnati to the west.<sup>ii</sup> Staff's review of Company-supplied drawings for the parcel and several site inspections revealed that most of the parcel is used for electric distribution and electric transmission facilities. There are two natural gas pipelines and a small structure that houses what the Company describes as a city gate metering and regulating station located near the eastern edge of the parcel east of the current I-75/I-71 bridge.<sup>iii</sup> However, all of the MGP remediation work was conducted in areas of the parcel that are devoted to electric transmission (and perhaps electric distribution). None of the remediation work was performed in the section of the parcel devoted to the natural gas pipelines (see Attachment MGP-10), therefore the expenses incurred were not related to the

---

<sup>i</sup> Staff interview with Company personnel, November 15, 2012

<sup>ii</sup> Company response to Staff Data Request DR 68-001, September 17, 2012, at 2.

<sup>iii</sup> Site drawing provided in response to Staff data request DR 68-001 as updated during Staff interview of Company personnel, November 15, 2012.

operation, maintenance, or repair of natural gas distribution facilities and should not be recovered in natural gas distribution rates.

### **Staff's Recommendations for Recovery**

Based on the findings that much of the MGP investigation and remediation costs were incurred in areas of the former MGP sites that are not currently used and useful for natural gas distribution service and are thus not recoverable in natural gas rates, the Staff made several adjustments to Duke's proposed recovery of the MGP expenses. The adjustments were computed using data and information provided by the Company, including site drawings showing the structures and facilities at both former MGP sites, the location and depth of the remediation activities, and the cost data for each site detailed above in Figures MGP-1 – MGP-3. Where necessary, the Staff used averages in its calculations when more detailed data was not available.

To arrive at its recommended MGP recovery amount, the Staff first eliminated all expenses incurred at the West End site. As discussed above, none of the remediation work at West End was done in the section of the site that is used for gas distribution. Therefore, the Staff does not believe that any of the costs at the West End site are properly includable in natural gas distribution rates.

To determine recoverable expenses at the East End site, the Staff identified and included all costs that were directly incurred at the Central Parcel. As noted above, the Staff determined that the entire Central Parcel is currently in use for gas operations. Thus, the remediation activities can be said to be incurred in order to operate or maintain gas plant in-service at the parcel. After reviewing site drawings of the East End site provided by the Company, the Staff determined that five of ten air monitors and seven of eight vibration monitors were directly related to operations at the Central Parcel. Therefore, the Staff included for recovery  $\frac{1}{2}$  of Duke's total proposed costs for air monitoring and  $\frac{7}{8}$  of the costs for vibration monitoring. All other remediation costs at the site were incurred at the Eastern or Western Parcels. However, Duke was unable to further break down the annual costs identified in its Schedule WPC-3.2b (shown in Figure MGP-1 and MGP-2 above) and assign the costs to the Eastern or Western Parcel or particular work activities at the site. As a result, the Staff used the total of the remaining costs to calculate an average cost per cubic foot of remediation by dividing the total remaining costs by the total cubic feet of remediation performed at the East End site. Utilizing data provided by the Company<sup>i</sup>, the Staff determined that a total of 5,808,316 cubic feet of soil was remediated at the East End site (see Attachment MGP-11). The total remaining costs (those not directly related to the Central Parcel) were

---

<sup>i</sup> Site drawing provided in response to Staff data request DR 68-001 as updated during Staff interview of Company personnel, October 18, 2012. (See also Attachment MGP-11.)

\$24,965,769. The Staff divided this number by the total cubic feet remediated to arrive at an average cost per cubic foot of remediation of \$4.30. The Staff then multiplied this amount by the cubic feet of soil that was remediated within the areas determined to be used and useful at the Eastern and Western Parcels. This figure was computed by using GIS software to determine the square footage of the buffer areas that the Staff deemed used and useful and multiplying that amount by the remediation depth in the applicable buffer areas. The buffer areas and their location relative to the remediation zones and the depth of the remediation within the zones are shown on Attachment 12. The total cubic feet remediated in these zones is shown in Figure MGP-4 below.

**Figure MGP-4**  
**Intersection of Buffers and Remediation Zones**

Attachment 12 Zone	Buffered Feature	Remediation Depth	Square Feet	Cubic Feet
A	Vaporizer Building	2	1,614	3,228
D	Pipeline	20	41,766	835,320
E	Pipeline	2	10,152	20,304
-	Other Infrastructure	-	-	269,880
<b>Total:</b>				<b>1,128,732</b>

The sum total of the Staff's recommended adjustments to Duke's proposed remediation costs recovery (including direct costs associated with the Central Parcel plus the used and useful portions of the Eastern and Western Parcels and a revised carrying cost calculation) is shown on Attachment MGP-13. As shown in Attachment MGP-13, the Staff recommends that Duke should be permitted to recover \$6,367,724 in total remediation expenses. This amount includes carrying costs totaling \$610,701. The Company's proposed carrying costs were modified to reflect Staff's adjustments to allowable MGP costs. This was done by calculating the cubic feet of soil remediated in the allowable zones as a percentage of the total cubic feet of soil remediated for the entire project. This equated to 19.43 percent. Staff then used the spreadsheet provided by the Company in response to Staff DR 70 to calculate the new carrying costs by applying this percentage to the monthly expense balances reported therein. This modification ensures that carrying costs will only be calculated based on areas of remediation associated with plant that is used and useful. The only other modification that Staff made to the Company's calculation was to apply the half-month convention, which Staff believes to be more appropriate. The Company's approach assumed that all costs were incurred on the first of each month, whereas the Staff's approach assumes that the expenses were incurred throughout the month and, therefore, uses a midpoint calculation. The Staff's recommended adjustments to Company schedule WPC-3.2b are shown in Attachment MGP-14.

The Staff also does not agree with Duke that the MGP investigation and remediation expenses should be recovered in base rates. Except for certain ongoing environmental monitoring costs, the MGP costs are one-time nonrecurring expenses that would continue to be recovered in base rates until the Company's next rate case even after the actual expenses incurred (including carrying costs) are fully recovered. The Staff recommends that instead of collecting the Staff-recommended radiation expenses in base rates, the Company should file a rider application in the docket for recovery of the authorized MGP expenses. The Staff recommends that the rider should recover the eligible MGP expenses over a three-year period (including carrying costs set at the long term debt rate approved by the Commission in this case) and be allocated to customers pursuant to the customer rate allocation ultimately adopted in this case. The Staff recommends that the ongoing environmental monitoring costs should continue to be deferred under authority granted by the Commission in Case No. 09-712-GA-AAM with future recovery of the expenses determined in a future rate proceeding.

#### **Potential for Future Duke Insurance Reimbursement**

Notwithstanding the Staff's recommendations for Duke's recovery of the Staff-recommended MGP remediation expenses, Duke informed the Staff that it has general liability insurance coverage that may cover some or all of Company's MGP-related remediation costs. In discussions with the Staff, Duke indicated that it is still in the early stages of investigating what, if any, coverage might be available. The Company stated that issue of insurance coverage for environmental clean-up of the sites is complex. It says complicating factors such as changes in ownership of policy-holders and imprecise language in very old policies. Duke stated that, given the age of the policies, it is even difficult to determine if some policy holders are still in business.<sup>i</sup> Despite the difficulties Duke may encounter in collecting MGP investigation remediation from insurers, the Staff recommends that the Commission direct that Duke should use its utmost efforts to collect all remediation costs available under its insurance policies. Further, the Staff recommends that the Commission direct that any proceeds paid by insurers for MGP investigation and remediation costs should be split between shareholders and ratepayers, commensurate with the proportion of MGP costs paid by the ratepayers, until customers are fully reimbursed (including any applicable carrying costs set at the long term debt rate approved by the Commission in this case) for MGP expenses that were charged to them.

---

<sup>i</sup> Staff interview with Company personnel, October 18, 2012

**Staff Recommended Recoverable Remediation Expenses** **PAGE 1 OF 2**

Line No.	East End - Total	Total (Through Mar 2012)	Total (Mar - Dec 2012)	Total
	<b>External Charges</b>	\$	\$	\$
1	Investigation	689,355	-	689,355
2	Air Monitoring	834,889	170,696.53	1,005,586
3	Security	154,327	1,944.75	156,272
4	Analytical Laboratory	726,842	128,980.68	855,823
5	Contractor Support	18,149	11,631.30	29,781
6	Construction Management/Detailed Design	16,563,445	1,868,032.26	18,431,477
7	Vibration Monitoring	395,566	64,575.00	460,141
8	Fuel	107,335	15,395.32	122,730
9	Miscellaneous	88,781	36,301.28	125,083
10	Soil Disposal/Landfill	2,735,031	225,766.28	2,960,797
11	<b>External Charges Total</b>	<b>22,313,721</b>	<b>2,523,323</b>	<b>24,837,045</b>
	<b>Internal Charges</b>			
12	Duke Internal Expenses	163,060	10,753	173,814
13	Duke Laboratory Labor	123,285	10,915	134,199
14	Duke EHS Audit Team	4,073	-	4,073
15	Duke Gas Oversight	10,911	-	10,911
16	Duke Internal Surveying	165,738	-	165,738
17	Duke MGP PM/Construction Oversight	440,709	96,776	537,484
18	<b>Internal Charges Total</b>	<b>907,776</b>	<b>118,444</b>	<b>1,026,220</b>
19	<b>Account Accruals</b>	<b>10,538</b>	<b>(2,617)</b>	<b>7,921</b>
20	<b>Total</b>	<b>23,232,036</b>	<b>2,639,150</b>	<b>25,871,186</b>

**Staff Recommended Recoverable Remediation Expenses**

**PAGE 2 OF 2**

Line No.	Adjusted East End - Total	Total	Total	Total
		\$	\$	\$
21	Total East End Site Remediation (Cubic Feet) <sup>1</sup>			5,808,316
22	Staff Allowable Remediation (Cubic Feet) <sup>2</sup>			1,128,732
23	Allowed Costs Expressed as a Percentage of Total <sup>3</sup>			19.43%
24	Air Monitoring - Allocated Costs <sup>4</sup>	417,445	85,348	502,793
25	Vibration Monitoring - Allocated Costs <sup>5</sup>	49,446	8,072	57,518
26	All Other - Allocated <sup>6</sup>	22,001,581	2,403,878	24,405,459
27	Total Costs to be Allocated (Line 24+Line 25+Line 26)	22,468,471	2,497,298	24,965,769
28	Cost per Cubic Foot (Line 27 / Line 21)			4.30
29	Total Allocated Costs (Line 22 x Line 28)	4,366,306	485,301	4,851,606
30	Air Monitoring - Direct Costs <sup>7</sup>	417,445	85,348	502,793
31	Vibration Monitoring - Direct Costs <sup>8</sup>	346,121	56,503	402,624
32	Carrying Charges <sup>9</sup>	331,089	279,612	610,701
33	Adjusted Total <sup>10</sup>	5,460,959	906,764	6,367,724

<sup>1</sup> Total cubic feet of remediation for East End MGP Site.

<sup>2</sup> Total cubic feet determined by Staff to be associated with property that is used and useful.

<sup>3</sup> Line 22 / Line 21 - Percentage of remediation determined by Staff to be associated with property that is used and useful.

<sup>4</sup> Air Monitoring Allocated costs (50%) were calculated by dividing number of air monitors *not* utilized at the Central Parcel (5), divided by number of total air monitors (10). This percentage was then applied to the total Air Monitoring costs from Line 2 with the result to be allocated based on Staff's methodology.

<sup>5</sup> Vibration Monitoring Allocated costs (12.5%) was calculated by dividing number of vibration monitors *not* utilized in direct protection of in-service infrastructure (1), divided by number of total air monitors (8). This percentage was then applied to the total Vibration Monitoring costs from Line 7 with the result to be allocated based on Staff's methodology.

<sup>6</sup> All costs incurred at the East End site *excluding* Air Monitoring and Vibration Monitoring. These costs were not directly attributable to a specific location at the East End site and are therefore allocated based on Staff's methodology.

<sup>7</sup> Air Monitoring Direct Costs (50%) include the remaining Air Monitoring costs from Line 2 that were associated with air monitors utilized by the Central Parcel (5), which the Staff determined to be used and useful. These costs were determined by Staff to be recoverable.

<sup>8</sup> Vibration Monitoring Direct Cost Factor (87.5%) includes the remaining Vibration Monitoring costs associated with vibration monitors utilized to protect in-service infrastructure. These costs were determined by Staff to be recoverable.

<sup>9</sup> Carrying Charges were calculated using the allowable monthly expense totals (monthly expenses provided by the Company allocated at 19.43%) multiplied by the monthly long-term debt rate using a half-month convention.

<sup>10</sup> Total costs allowable for recovery. Calculated by adding Lines 29, 30, 31, and 32.



**Attachment MGP-14**  
**Staff Recommended Adjustments to Company Proposed MGP Expenses**

PAGE 1 OF 3

<u>Line No.</u>	<u>Description</u>	<u>Proposed</u> \$	<u>Staff Adjustment</u> \$	<u>Adjusted Total</u> \$
1	<b>East End</b>			
2	Investigation	689,355	(555,392)	133,962
3	Air Monitoring	834,889	(234,388)	600,501
4	Security	154,327	(123,959)	30,368
5	Analytical Laboratory	726,842	(560,530)	166,312
6	Contractor Support	18,149	(12,362)	5,787
7	Constr. Mgmnt/Detailed Design	16,563,445	(12,981,649)	3,581,795
8	Vibration Monitoring	395,566	18,235	413,801
9	Fuel	107,335	(83,485)	23,850
10	Miscellaneous	88,781	(64,474)	24,307
11	Soil Disposal/Landfill	2,735,031	(2,159,658)	575,373
12	Duke Internal Expenses	163,060	(129,283)	33,777
13	Duke Laboratory Labor	123,285	(97,206)	26,079
14	Duke EHS Audit Team	4,073	(3,282)	792
15	Duke Gas Oversight	10,911	(8,791)	2,120
16	Duke Internal Surveying	165,738	(133,530)	32,208
17	Duke MGP PM/Constr. Oversight	440,709	(336,259)	104,450
18	Account Accruals	10,538	(8,999)	1,539
19	<b>East End Yearly Total</b>	23,232,036	(17,475,013)	5,757,023

Attachment MGP-14

PAGE 2 OF 3

<u>Line No.</u>	<u>Description</u>	<u>Proposed</u> \$	<u>Staff Adjustment</u> \$	<u>Adjusted Total</u> \$
20	<b>West End</b>			
21	Investigation	548,384	(548,384)	-
22	Air Monitoring	404,323	(404,323)	-
23	Security	3,826	(3,826)	-
24	Analytical Laboratory	412,881	(412,881)	-
25	Contractor Support	13,778	(13,778)	-
26	Constr. Mgmt/Detailed Design	13,929,353	(13,929,353)	-
27	Vibration Monitoring	9,362	(9,362)	-
28	Fuel	232,718	(232,718)	-
29	Miscellaneous	539,738	(539,738)	-
30	Soil Disposal/Landfill	2,982,159	(2,982,159)	-
31	Duke Internal Expenses	91,236	(91,236)	-
32	Duke Laboratory Labor	66,677	(66,677)	-
33	Duke EHS Audit Team	5,949	(5,949)	-
34	Duke Power Delivery Oversight	98,781	(98,781)	-
35	Duke Internal Surveying	53,269	(53,269)	-
36	Duke MGP PM/Constr. Oversight	277,210	(277,210)	-
37	Account Accruals	48,165	(48,165)	-
38	West End Yearly Total	19,717,809	(19,717,809)	-
39	Property Purchase	2,336,460	(2,336,460)	-
40	Journal Entries	0	(0)	-

Attachment MGP-14

PAGE 3 OF 3

Line No.		<u>Proposed</u>	<u>Staff Adjustment</u>	<u>Adjusted Total</u>
		\$	\$	\$
	<u>Combined East End and West End</u>			
42	Ohio MGP Estimates (Apr-Dec 2012)	15,000,000		
			<i>Totals Above Include Amounts thru Dec 2012</i>	
44	Carrying Costs (Thru Mar 2012)	2,453,262	(2,122,173)	331,089
45	Carrying Costs (Apr-Dec 2012)	<u>2,593,850</u>	<u>(2,314,238)</u>	<u>279,612</u>
46				
47	<b>Total</b>	<b>65,333,417</b>	<b>(58,965,693)</b>	<b><u>6,367,724</u></b>
48	Amortization Period (3 years)	3		3
49	<b>Amount to Include for Recovery</b>	<b>21,777,806</b>		<b><u>2,122,575</u></b>

Purchased Property

Western Parcel

Central Parcel

Eastern Parcel

Google earth

Imagery Date: 04/2005 Imagery Date: 04/2005 Imagery Date: 04/2005 Imagery Date: 04/2005

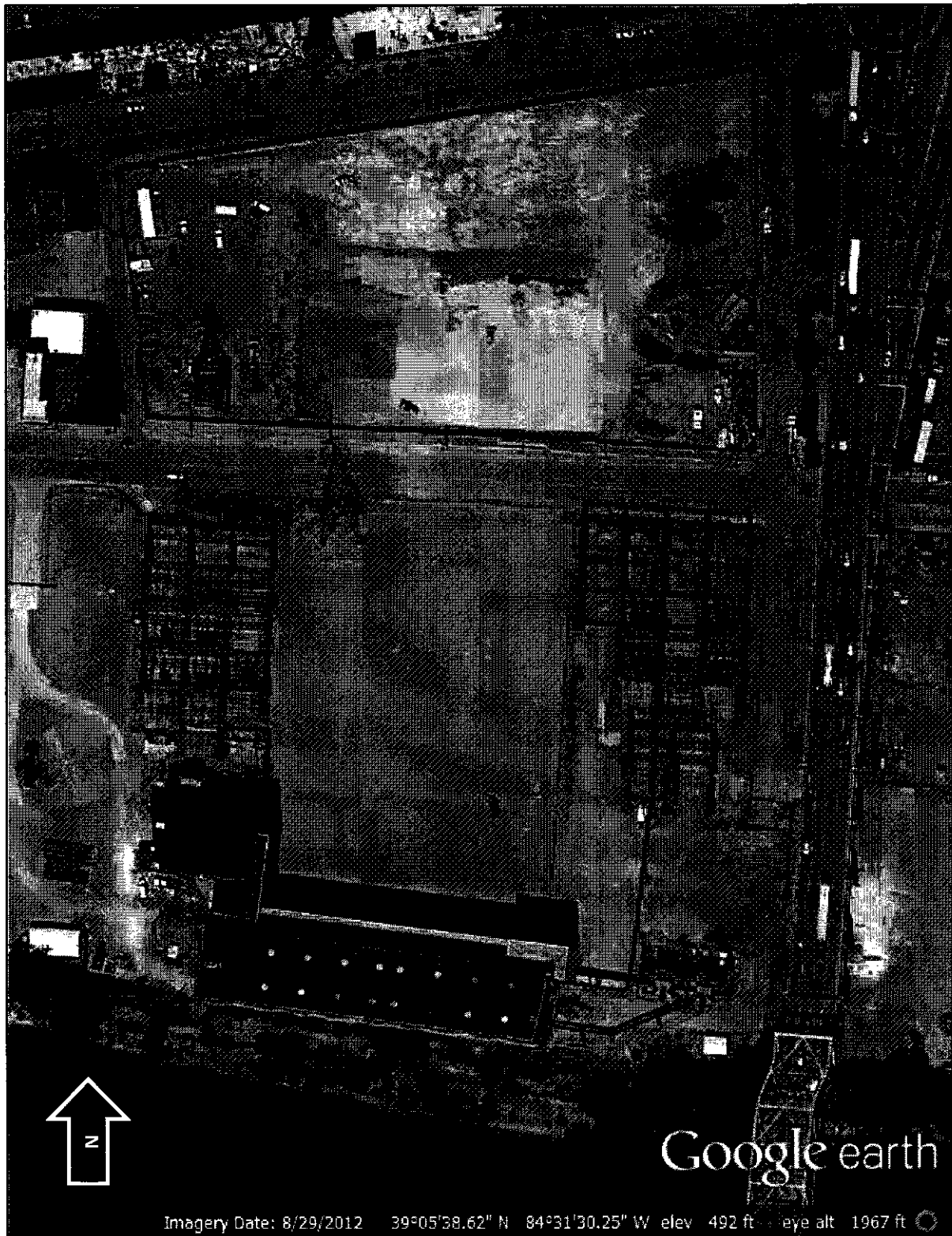
53

**Attachment MGP-2: East End Site – 2012 Image**



Background Image Source: Google Earth

**Attachment MGP-4: West End Site – 2012 Aerial Photograph**



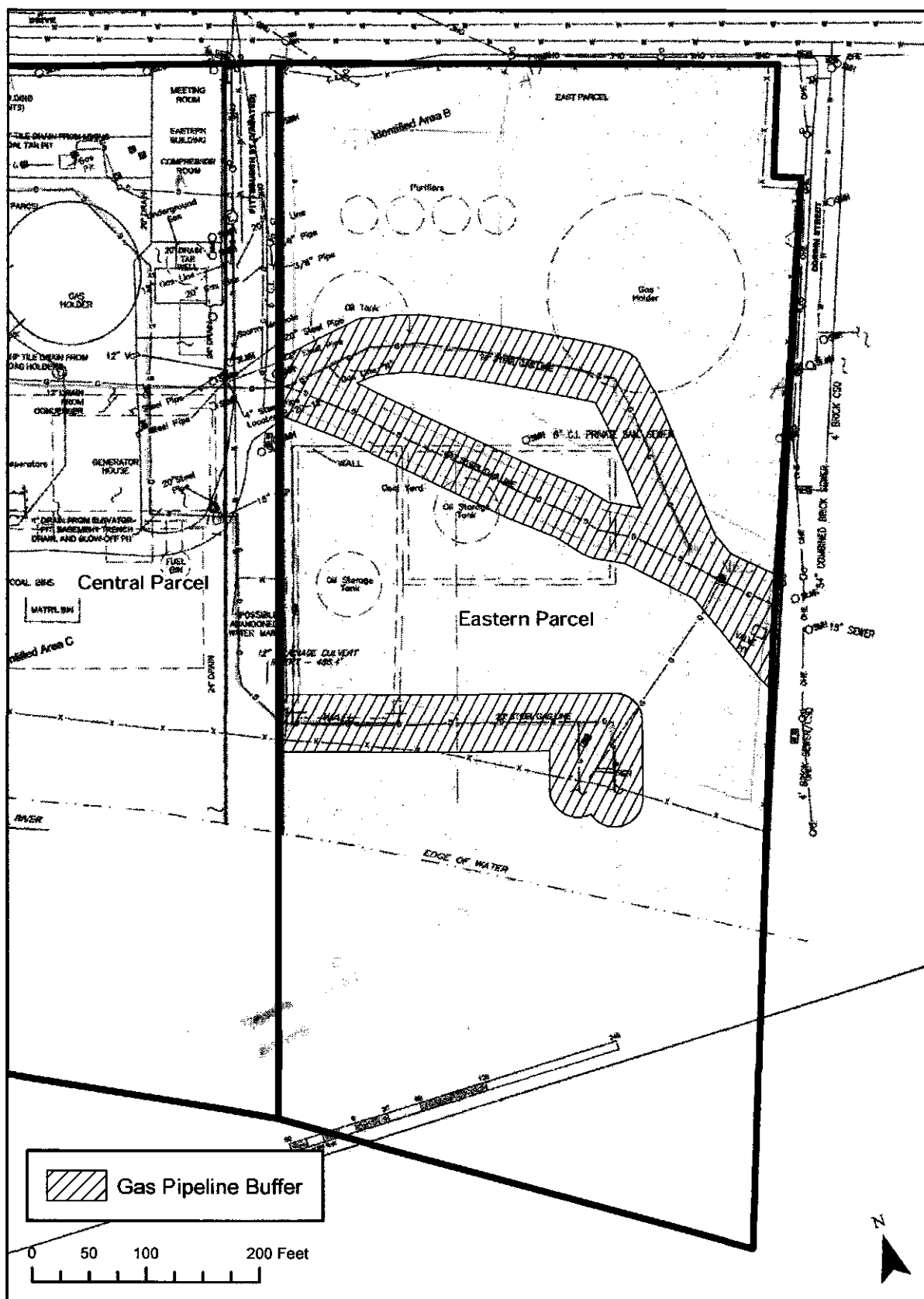
Background Image Source: Google Earth

**Attachment MGP-3: West End Site - 2007 Aerial Photograph**



Background Image Source: Ohio Geographically Referenced Information Program (OGRIP)

# Attachment MGP-5: East End Site - Eastern Parcel Gas Pipeline Buffers



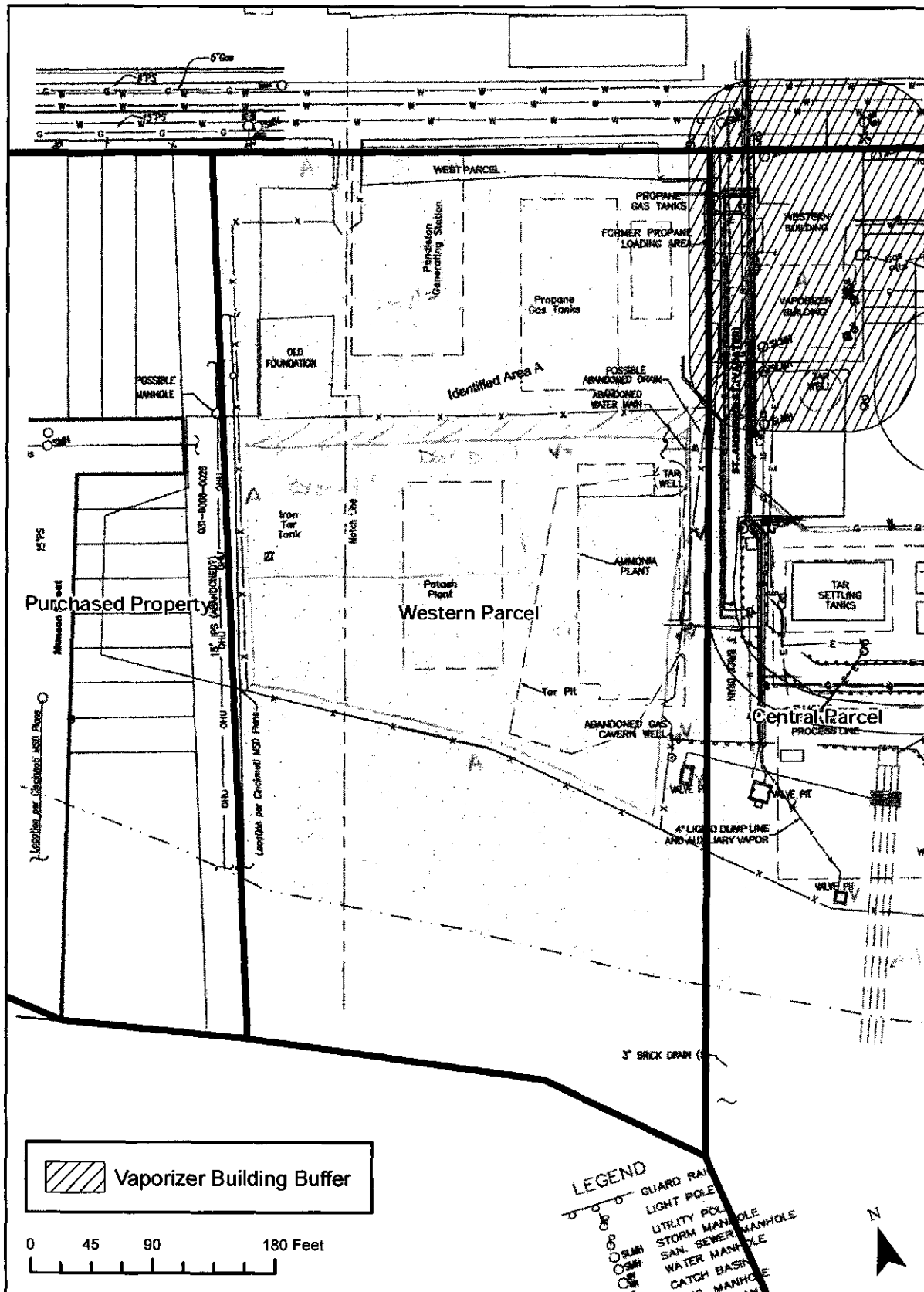
Background Image Source: Duke diagram provided in response to DR 69-001



The map is a technical site plan of an industrial facility, divided into three main sections: Western Parcel, Central Parcel, and Eastern Parcel. The Western Parcel on the left contains propane gas tanks, a former propane loading area, and a possible abandoned drain. The Central Parcel in the middle features two large gas holders, a tar settling tank, a generator house, and various piping systems. The Eastern Parcel on the right includes a meeting room, compressor room, and oil storage tanks. The map is densely packed with lines representing pipes, tanks, and structural elements. A legend in the bottom left corner defines symbols for guard rails, utility poles, storm and sanitary manholes, water and catch basins, electrical manholes, fire hydrants, gas valves, and unknown manholes. It also defines line types for gas, fence, water, electric overhead and underground, sanitary and storm sewer lines, and the approximate edge of water. A scale bar at the bottom left shows distances from 0 to 100 feet. A north arrow is located in the bottom right corner. The map is labeled with 'Western Parcel', 'Central Parcel', and 'Eastern Parcel' in large, bold letters. Various other labels include 'Propane Gas Tanks', 'Former Propane Loading Area', 'Possible Abandoned Drain', 'Tar Settling Tank', 'Generator House', 'Gas Holder', 'Oil Storage Tank', 'WALL', 'ROAD RIVER', and 'Identified Area C'.

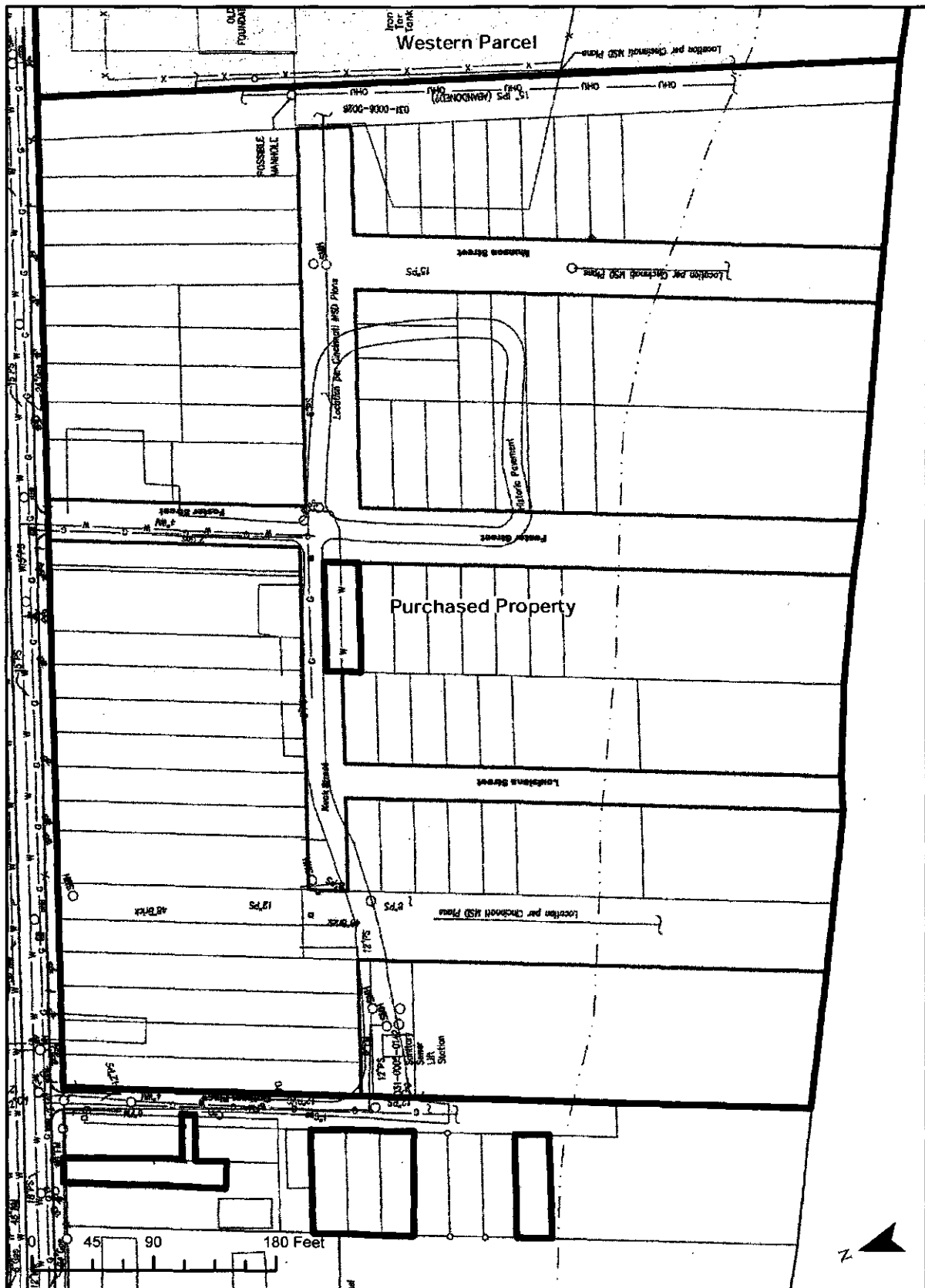
58

Attachment MGP-7: East End Site - Western Parcel Vaporizer Building Buffer



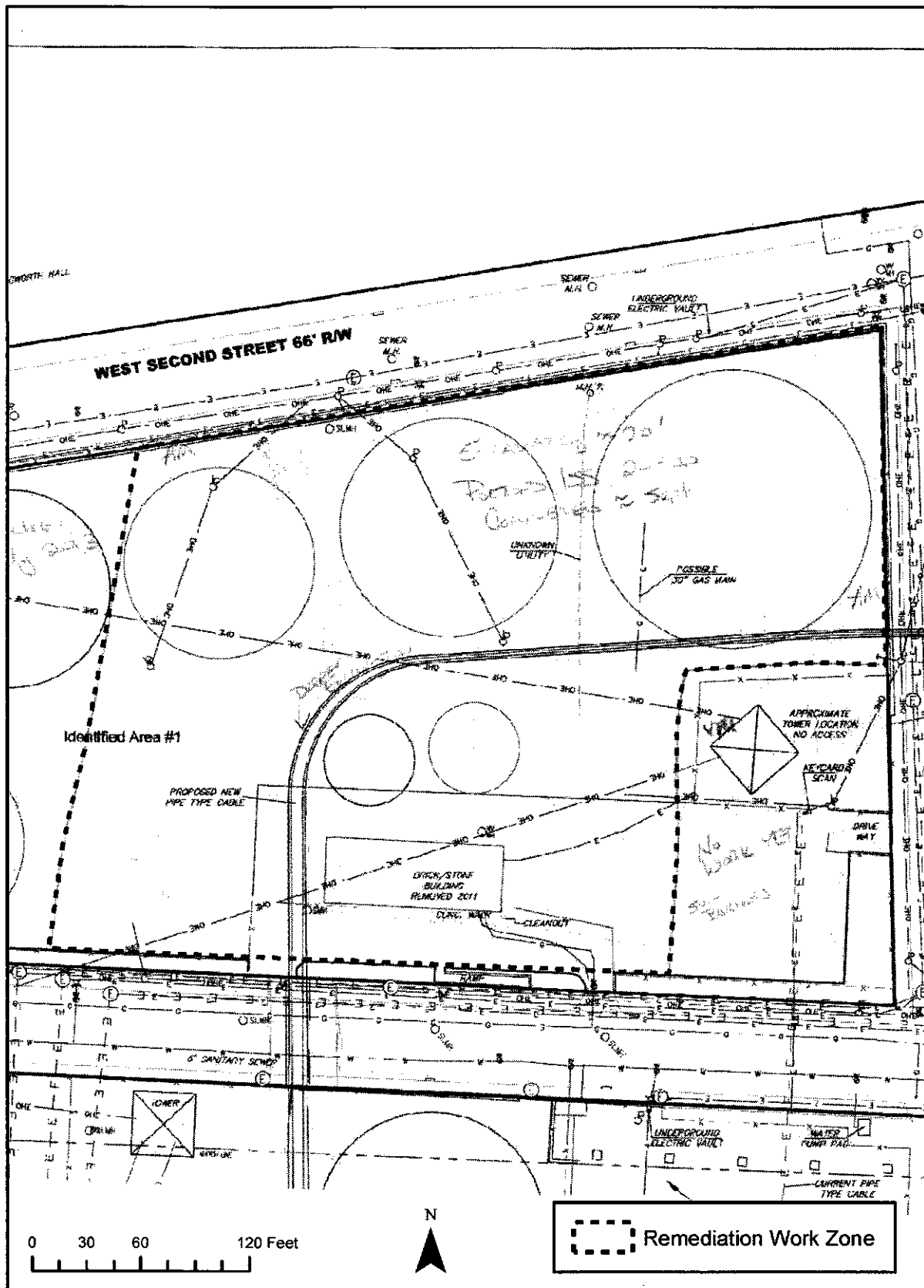
Background Image Source: Duke diagram provided in response to DR 69-001

Attachment MGP-8: East End Site - Purchased Property with Sub-Parcel Boundaries



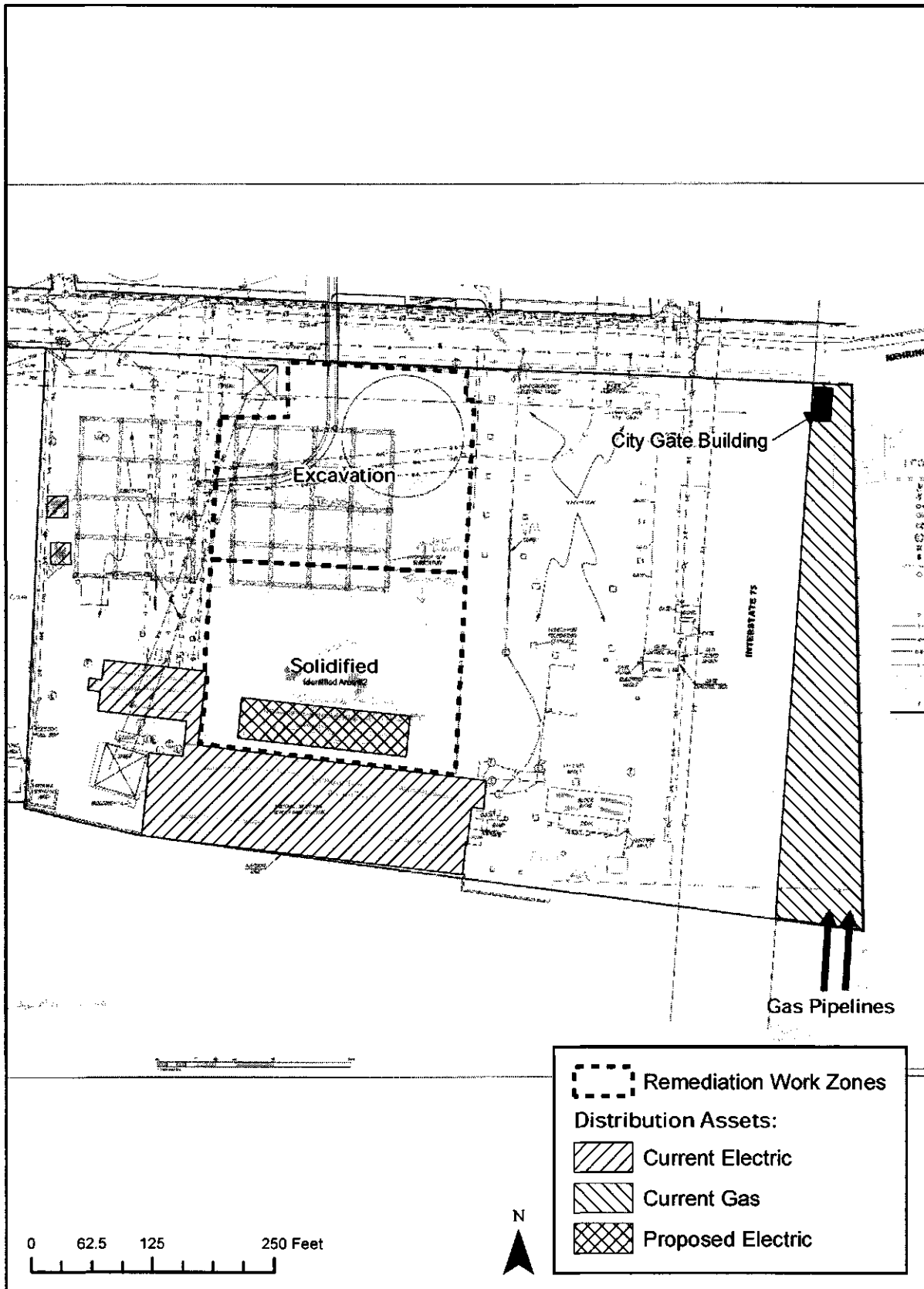
Background Image Source: Duke diagram provided in response to DR 69-001

Attachment MGP-9: West End Site - Remediation Work Zone North of W. Mehring Way



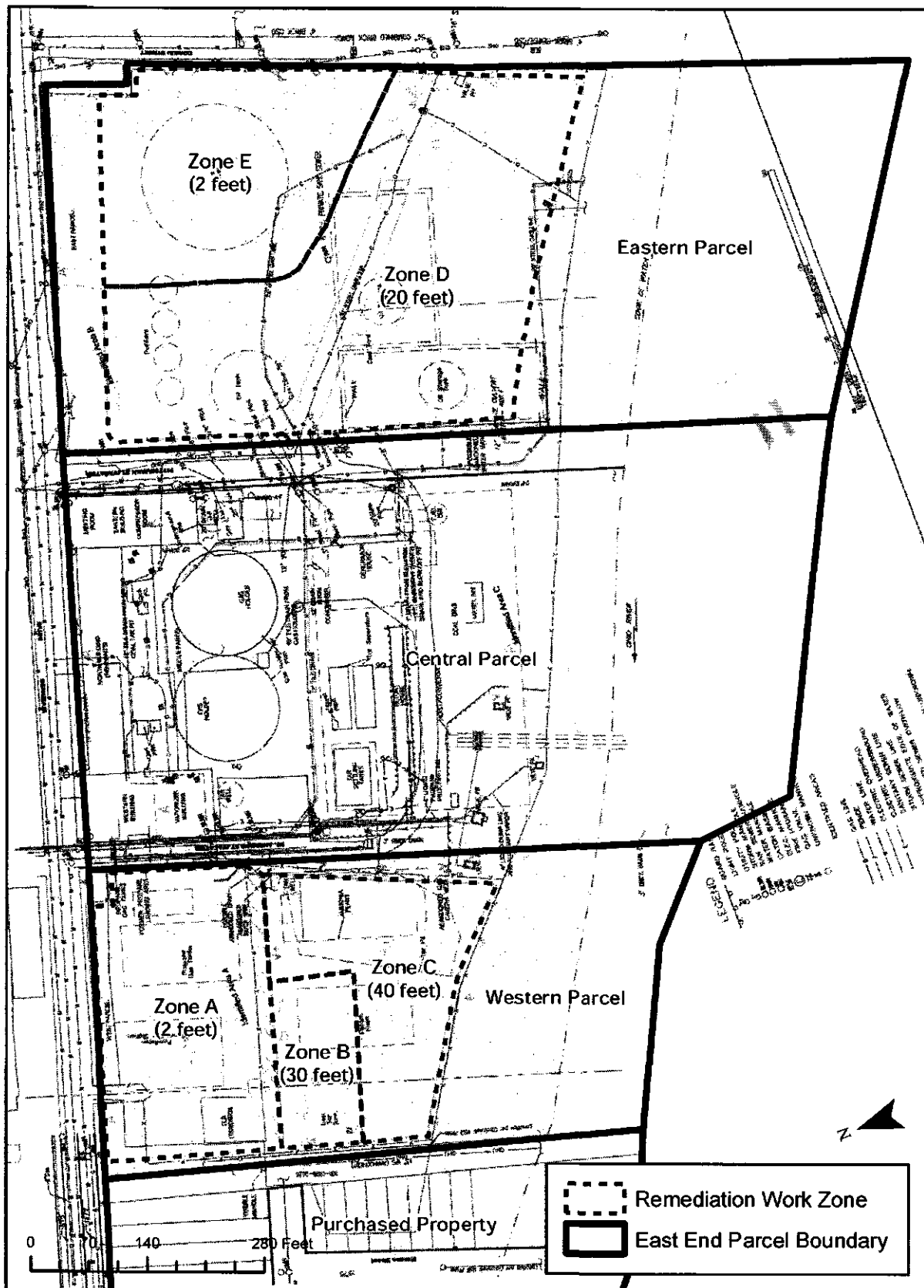
Background Image Source: Duke diagram as modified on 11/15/2012

Attachment MGP-10: West End Site - Remediation Work Zones and Distribution Assets



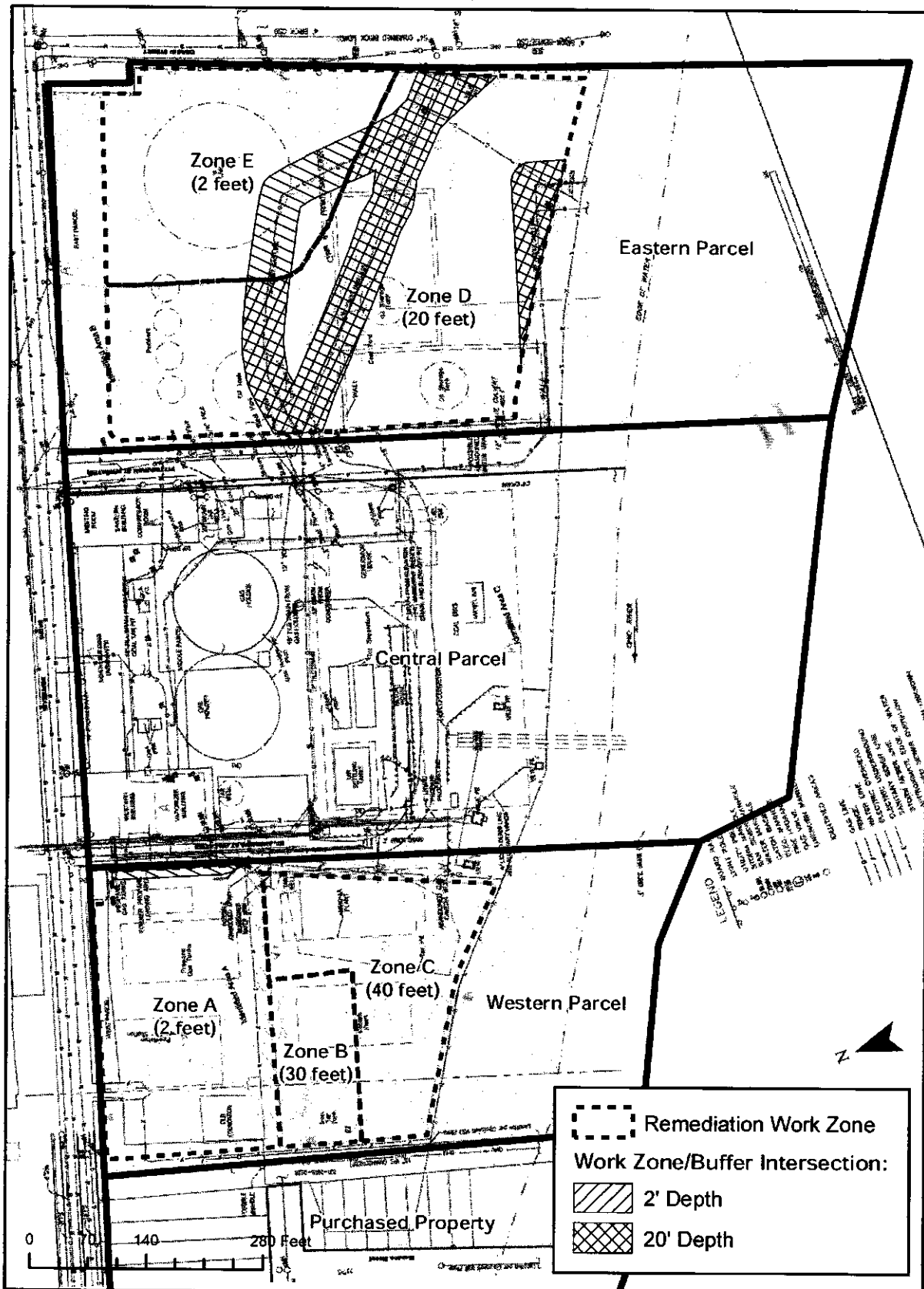
Background Image Source: Duke diagram as modified on 11/15/2012

Attachment MGP-11: East End Site - Remediation Work Zones with Depths



Background Image Source: Duke diagram provided in response to DR 69-001

Attachment MGP-12: East End Site - Remediation Work Zone and Buffer Intersections



Background Image Source: Duke diagram provided in response to DR 69-001

## **PIPELINE SAFETY**

Staff conducted gas pipeline safety audits at Duke in the years 2010, 2011, and 2012. Staff assessed Duke's compliance with the state and federal gas pipeline safety regulations (GPS) outlined in Ohio Administrative Code 4901:1-16. Under 4901:1-16-03 the Commission has adopted and the Staff enforces federal regulations 49 C.F.R. (Code of Federal Regulations) Part 191, 192, 199 and 40. Staff is required to conduct GPS audits annually to confirm that Duke is complying with federal and state pipeline regulations.

The scope of Staff's GPS audits included the following:

- Review of records for compliance with gas pipeline safety regulations. (2010, 2011, 2012)
- Physical site visits to verify compliance with safety inspection standards. (2010, 2011, 2012)
- Review of operations plans, emergency plans and associated standards and procedures for compliance with emergency response, construction, operations and maintenance requirements. (2010, 2011, 2012)
- Review of drug and alcohol programs for employees and contractors. (2010, 2011, 2012)
- Review of the Operator Qualification Program and records. (2010, 2012)
- Review of the Public Awareness Program and associated records. (2010, 2011, 2012)
- Review of Duke's Ohio Utilities Protection Service and Call Before You Dig Programs. (2010, 2012)
- Review of Duke's Distribution Integrity Management Plan. (2012)
- Review of Duke's Control Room Management Plan. (2012)

Staff examined Company records and conducted field inspections. The audit of Company records was done out of Duke's headquarters building and various satellite offices. The field inspections were conducted at the Company's pipeline facilities and included inspections of: pressure regulating stations, critical valves, corrosion control, leakage survey areas, pipeline patrolling, drug and alcohol test records, public awareness, operator qualifications, pressure testing, odorization, and emergency response. Staff reviewed Company records to determine if Duke had performed inspections and maintenance of its gas pipeline system in conformance with required schedules.

During the records review portion of the GPS audit a number of areas were reviewed such as: valve maintenance, pressure regulation, corrosion control, public awareness,



damage prevention, drug and alcohol records, operator qualifications, leakage surveys, pipeline patrolling, pressure testing, odorization, control room management and emergency response. All records were reviewed for compliance with the appropriate timeline of inspection and maintenance on the gas pipeline system.

Staff notes that from April 2010 to July 2012 Duke was issued six Notices of Probable Non-Compliance ("Notices"); two of which were the result of reportable incidents<sup>1</sup> and the remaining four Notices were sent to the Company, for failure to perform certain maintenance tasks according to required schedules. The Company's response to the Notices stated that Duke's failure to make timely inspections would largely be remedied through the updating of their "eMax" Work Management System and the activation of the "Pipeline Compliance System (PCS)-Cathodic Protection Data Management" (CPDM) module scheduling functions. Staff also found that Duke did not have well established procedures for some required design, construction and maintenance tasks nor did the Company evaluate and rank risks to their pipeline system in their "Distribution Integrity Management Program" (DIMP) plan. Duke responded by revising their procedures and re-evaluating their DIMP plan.

Staff has verified that Duke has completed all elements of their proposed corrective actions for the above noted violations.

### **Pipeline Safety Incidents and Outages**

Duke was involved in three incidents and two outages from April 2010 to July 2012 as noted below.

#### **Incidents**

On April 5, 2010, a natural gas pipeline contractor working for Duke failed to follow the Company's "Flexible Service Riser Replacement" procedures, resulting in the death of a contractor. Duke, in its "Incident Prevention Plan" detailed actions taken to prevent recurrence including: placing greater emphasis on contractor training and qualifications, as well as increasing the number of audits performed by Duke of its contractors in the field.

The second incident occurred on November 2, 2010 in Lebanon, Ohio when an apartment exploded as a result of a contractor not properly following Company

---

<sup>1</sup> Administrative Code 4901:1-16-01(G) "Incident" means an event that involves a release of gas from an intrastate gas pipeline facility and results in any of the following: (1) a death, (2) personal injury requiring inpatient hospital, (3) unintentional estimate gas loss of three million cubic feet or more, (4) estimated property damage of fifty thousand dollars or more, excluding the cost of gas lost which is the sum of: (a) the estimated cost of repairing and/or replacing the physical damage to the pipeline facility, (b) the cost of material labor, and equipment to repair the leak, including meter turn-off, meter turn-on, and light up, (c) the estimated cost of repairing and/or replacing other damaged property of the operator or other, or both.

procedures, and the Company's failure to comply with the Minimum Gas Service Standards.<sup>i</sup> Staff opened a gas pipeline safety case<sup>ii</sup> that was resolved through a Stipulation and Recommendation to the Commission, and the Commission ordering Duke to take corrective actions and pay a \$500,000 forfeiture.

On November 11, 2010 a Duke contractor hit a transmission pipeline causing a two foot gouge and subsequent puncture to the pipeline wall, as well as minimal damage to a nearby home. A Staff investigation found no code violations by Duke; however the contractor was required to submit a recovery plan to Duke outlining commitments to improved damage prevention practices.

### Outages

On August 19, 2010 while performing a tie-in during a construction project, a slug of air inadvertently entered Duke's pipeline causing an outage for 454 customers for approximately six hours until the line could be properly purged of air. Actions taken to minimize the possibility of a recurrence include revising Duke Procedure GD40.02-02 – "Standard Pressure Abandonment" to include a checklist to assure proper communication during the abandonment procedure.

On July 6, 2011 a third party contractor hit a properly marked gas main causing a leak and subsequent outage of 129 customers at an apartment complex. Duke dispatched a crew, repaired the leak and restored service within approximately two hours.

### **Customer Contacts**

Staff reviewed the customer contacts<sup>iii</sup> to the Call Center regarding Duke<sup>iv</sup> for the period January 1, 2010 through September 30, 2012. The Commission received 10,874 contacts during this period. Contacts in 2010 numbered 4,895, with 3,454 contacts in 2011 and 2,225 contacts through September, 2012.

Contacts about disconnection issues or payment arrangements prompted the largest number of contacts, with 4,340 for the period. The next highest category was billing issues with 2,118 contacts. Electric or gas choice issues led to 1,095 contacts.

---

<sup>i</sup> The "Minimum Gas Service Standards" are Chapter 4901:1-13 Administrative Code. The specific rule in violation was 4901:1-13-05(A)(3)(c) which requires a pressure test for an existing house line before reestablishing gas service, when gas service has been off for thirty days or more.

<sup>ii</sup> Case No. 11-3636-GA-GPS, In the Matter of the Investigation of Duke Energy Ohio, Inc., Relative to Its Compliance with the Natural Gas Pipeline Safety Standards and Related Matters.

<sup>iii</sup> Consumer contacts to the Commission's Call Center may result in either an educational reference or an informal complaint investigation.

<sup>iv</sup> Duke is a combination electric and gas utility, because consumers may contact the Commission about either or both their electric and gas service, the Call Center does not segregate complaints by industry.

Before calling the Company, 1,003 customers called the Call Center. Most of these customers were seeking account information and were directed back to the Company to give Duke the first opportunity to respond to their customers.

New service or repair issues comprised the next category with 736 contacts. Other service-related issues including 155 contacts were outage-related. One hundred thirty-seven customers voiced their concerns about the quality of the Company's customer service. Eighty-three customers contacted the Call Center over the period because they had difficulty reaching the Company.

Three hundred sixty-five customers had issues or questions regarding the Commission, while one hundred fifty-seven had comments on the Company's policies. One hundred thirty-nine customer contacts were to protest the Company's rate cases.

One hundred fourteen contacts were complaints or concerns regarding deposits. Contacts regarding smart meters or privacy issues accounted for seventy contacts. The remaining 362 were miscellaneous contacts, including questions about non-jurisdictional issues, requests for formal complaints or issues regarding utility easements.

## **PROPOSED ALTERNATIVE REGULATION PLAN**

Duke's alternative regulation plan consists of three components: 1) re-approval of existing Rider AMRP; 2) re-approval of Rider AU; and 3) approval of new Rider ASRP .

### **Accelerated Main Replacement Program**

In this proceeding Duke seeks re-approval of the Accelerated Main Replacement Program. The Commission originally approved adoption of the AMRP in Case No. 01-1228-GA-AIR. The Program replaces aged cast iron and bare steel mains of twelve inch diameter or less on an accelerated basis in order to improve safety and reliability, and to reduce leak rates on Duke's system. Prior to AMRP, Duke had approximately 1200 miles of cast iron and bare steel lines in Ohio, and has replaced approximately 985 miles to date. Duke estimates that about 215 miles of cast iron and bare steel mains remain to be replaced through the end of 2015 when program construction will terminate.

In Case No. 07-589-GA-AIR, Duke proposed to take ownership of customer service lines when maintenance was performed on a customer service line, or when it replaces or installs a new customer service line. The Commission granted such approval and to date, Duke has replaced approximately 91,200 main-to-curb service lines.

In 2008, Duke implemented a riser replacement program whose costs are recovered through Rider AMRP. Risers prone to leaks are being replaced with completion expected by the end of 2012.

In addition to re-approval of Rider AMRP in this proceeding, Duke also requests several program scope clarifications or changes. Duke requests that the Commission include language in its order explicitly allowing Duke to recover costs for plastic main-to-curb services and short segments of plastic pipe that are replaced as part of AMRP. Duke also requests, where applicable and permissible, to relocate natural gas meters currently situated inside a building to an external location. The meters to be relocated under this proposal are associated with services being replaced during the remainder of the AMRP Program. Duke further requests that costs associated with the riser replacement program be continued to be recovered through Rider AMRP until December 31, 2012.

## **AMRP Scope**

Staff believes it is important to clarify its expectations concerning the appropriate scope of the AMRP Rider. This clarification appears in the paragraphs below.

**Meter Relocations** – Duke has proposed to recover through Rider AMRP the cost of relocating meters from inside the premise to outside if they are associated with services being replaced during the remainder of the AMRP program. Staff notes that there are safety issues related to inside meters connected to a high pressure distribution system.<sup>i</sup> Staff recommends that the cost of relocating inside meters be recovered through Rider AMRP only in those cases where Duke plans the meter to be connected to a high pressure distribution system within two years after moving the meter outside.

**Plastic Pipe** – Duke has proposed to recover through Rider AMRP the cost of replacing plastic main-to-curb service lines and short segments of plastic main that it replaces as part of an AMRP project. Since the purpose of the AMRD is to replace cast-iron and bare steel pipe, Staff recommends that the cost of replacing plastic mains and service lines be recovered through Rider AMRP only when it is more economical to replace than it is to re-use such plastic pipe.

**Coated Pipe** – Since field-coated steel pipe installed prior to 1955 is generally considered unreliable, Staff believes it should be treated as bare steel pipe and therefore recommends that Duke be allowed to recover through Rider AMRP the cost of replacing such pipe. In the case of coated pipe installed between 1955 and 1970, such a decision is more complex. If, in the context of an AMRP project, Duke encounters coated steel pipe installed between 1955 and 1970, and inspection, analysis, and cathodic-protection test results indicate the pipe is ineffectively coated, then Staff recommends that Duke should be allowed to recover through Rider AMRP the cost of replacing such pipe as well as the cost of such inspection, analysis, and cathodic-protection testing it used to determine that the pipe is ineffectively coated. If, however, such testing indicates that the pipe is effectively coated, then the cost of such testing should be excluded from AMRP recovery.

**Governmental Relocations** – Staff generally supports Duke's current procedures for recovering the cost of governmental relocation projects through Rider AMRP when at least 85 percent of the pipe being replaced is cast iron or bare steel. Staff also recommends that AMRP cost recovery be reduced by the amount of any reimbursements Duke receives from the governmental agency mandating the relocation.

---

<sup>i</sup> High pressure distribution system is defined in Section 192.3 of the Pipeline Safety Regulations 49CFR Part 192.

**System Improvements** – Staff does not believe Rider AMRP should be used to recover the cost of increasing the capacity of mains to serve future customers. Staff therefore recommends that the cost of system improvements (over-sizing of mains) for future growth purposes should be recovered through Rider AMRP only if the over-sizing replaces cast-iron or bare-steel pipe and costs no more than an in-kind (size-for-size) replacement of such pipe.

**Regulating Stations** – Staff supports Duke's current procedure for recovering through Rider AMRP the cost associated with regulating stations. Duke's procedure is to exclude from Rider AMRP the cost of regulating station replacement or modification, and to recover the cost of regulating station removal through Rider AMRP only when such removal is associated with an AMRP main replacement project that does not involve regulating station replacement or modification.

Subject to Staff's comments on program scope above, Staff recommends re-approval of Rider AMRP as proposed by the Company.

### **Reporting Waiver for AMRP Projects**

On March 30, 2005 in Case No. 01-1228-GA-AIR, the Cinergy Corp.<sup>i</sup> filed an application requesting a waiver from reporting requirements found in the Administrative Code 4901:1-16-06 "Construction Reports" (Rule 6) for AMRP construction projects. Other than a brief description of the three types of AMRP construction projects, Duke provided no justification in the waiver application for why this waiver was needed. As a condition of the waiver, Duke stated that in the absence of Construction Reports, it would commit to "file annually a report detailing its AMRP construction activity with quarterly updates and to respond to any discovery request from Staff."<sup>ii</sup>

In the April 20, 2005 Forth Opinion and Order in the above case, the Commission granted Duke's waiver application. In the Order, the Commission found that "*Rule 6 is applicable to AMRP construction*" and "*(a)approval of CG&E's request for waiver of Rule 6, as to AMRP construction projects, is contingent upon CG&E's compliance with any Gas Pipeline Safety Staff's request for such AMRP construction information.*"<sup>iii</sup>

---

<sup>i</sup> Cinergy Corp. is the predecessor company to Duke Energy Ohio.

<sup>ii</sup> Case No. 01-1228-GA-AIR Application of the Cincinnati Gas and Electric Company For Waiver of Construction Reporting Under O.A.C. 4901:1-16-06 at pg. 2.

<sup>iii</sup> Forth Opinion and Order Case No. 05-0451 In the Matter of the Application of the Cincinnati Gas and Electric Company for Waiver of Rule 4901:1-16-06 Ohio Administrative Code, at pg. 9 and 10.

Rule 6 requires operators to submit three reports; before, during, and after each construction project involving an expenditure of two hundred thousand dollars or more.<sup>i</sup> An examination of Duke's submitted quarterly updates filed with the Commission<sup>ii</sup> show that approximately 66% of Company AMRP projects exceed the Rule 6 reporting threshold and that the construction reporting requirement would apply absent the waiver.

Both Columbia Gas of Ohio, Inc. ("Columbia") and The East Ohio Gas Company d/b/a Dominion East Ohio ("Dominion") have main replacement programs similar to Duke's AMRP program. Although Columbia and Dominion have each proposed to replace more miles of main than Duke has proposed, neither Columbia nor Dominion have applied for any reporting waiver or have expressed any hardships associated with meeting construction reporting requirements.

Staff through data requests and Company quarterly reports has been auditing AMRP construction projects, however without the more timely Rule 6 construction reports being filed, Staff has more difficulty determining the scope of a proposed construction project or when it is scheduled to begin and end. Staff see no justification to support Duke's Rule 6 waiver, and for the reasons stated above, Staff recommends that the waiver from reporting requirements found in O.A.C. 4901:1-16-06 be rescinded, effective 30 days following the issuance of an Opinion and Order in this case

#### **Advanced Utility Rider (Rider AU)**

Duke proposes to continue Rider AU beyond the base rates established in this case, and to roll-into base rates all SmartGrid plant and equipment accumulated through date certain, and all operation and maintenance costs net of so-called "addbacks" captured in the test year. Duke's proposal results in a zero dollar Rider AU going forward.

Staff supports Duke's proposal to continue Rider AU with certain modifications. For a more detailed discussion on Staff's recommendations for Rider AU as they affect this base rate proceeding, please see the Staff Report section titled Grid Modernization System on page 39.

---

<sup>i</sup> 4901:1-16-06(B)(1)the first report not later than twenty-one days before construction work will start, (2)the second report not later than seven days after construction work has started, (3)the third report not later than seven days after construction work has been completed.

<sup>ii</sup> Quarterly updates were filed in the following cases: 05-451-GA-UNC, (included quarterly updates for 2005 and 2006), 07-589-GA-AIR, 08-1250-GA-UNC, 09-1849-GA-RDR, 10-2788-GA-RDR, 11-5809-GA-RDR.

### **Accelerated Service Line Replacement Program (Rider ASRP)**

In its application, Duke proposes a new Rider ASRP to recover the cost of systematically replacing approximately 58,000 main-to-curb and curb-to-meter service lines identified as being either pre-1971 coated steel or other unprotected metallic service lines that are not otherwise covered under Duke's Accelerated Main Replacement Program (AMRP). ASRP, as proposed, will cost approximately \$317 million over a 9-10 year time frame. Duke estimates that the cost to replace leaking service lines on an "emergency" basis, as opposed to a systematic basis, will be approximately \$361 million.

Under its current Rider AMRP, Duke is already allowed to recover the cost of replacing service lines associated with the replacement of cast-iron/bare-steel mains as well as the cost of initial installation, repair, replacement, and maintenance of all curb-to-meter service lines. In this regard, Duke's current cost recovery for service line replacement is similar to that of Ohio's other large gas companies, none of which has been granted or has requested a rider similar to Duke's proposed Rider ASRP.

Staff does not recommend implementation of rider ASRP as proposed by Duke. Staff notes that Duke is the only large Ohio gas company whose main and service-line replacement program is expected to be concluded within the next few years. Duke expects that main line replacements currently authorized will be complete by the end of 2015. In this ASRP application, Duke requests recovery for replacement of approximately 58,000 main-to-curb and curb-to-main service lines, regardless of whether the service line is leaking. As an alternative to rider ASRP, Staff believes that Rider AMRP cost recovery for service lines should be extended to recover the cost of replacing leaking curb-to-meter service lines after 2015. After 2015, the program should be renamed the Leaking Service Line Replacement Program (LSLRP). AMRP costs associated with mains, risers and services constructed through 2015, but not yet recovered via a base-rate proceeding should continue to be recovered through Staff recommended Rider LSLRP. Staff further recommends that the Commission approve such an extension through year 2020. At that time, program evaluation should take place to determine whether such cost recovery for leaking service lines should continue.

### **Grid Modernization Section**

#### **The Future of Rider AU**

Duke has proposed to continue Rider AU beyond the base rates established by this rate case. Duke has proposed as a part of the instant case to roll into base rates all Grid Modernization (GridMod) plant and equipment accumulated through the date certain,



and all O&M costs net of so-called “addbacks,”<sup>i</sup> captured in the test year. This would result in a zero dollar Rider AU subject to annual adjustments reflecting future costs.

Staff supports Duke's proposal to continue Rider AU, however Staff recommends modifications to “zeroing-out” Rider AU. Staff believes that only plant and equipment accumulated in Rider AU, 2012 plant and equipment accumulated through the date certain, and associated depreciation, PISCC and property taxes should be rolled into base rates. Rider AU should continue for purposes of recovering deferred operating expenses, O&M expenses, and plant and equipment that is incremental to that which is included in base rates as a result of this case. This will result in the need to modify the rates in Rider AU, but not to zero.

In describing the rationale to continue the Rider, Duke discusses two filing schedules for the future Rider AU that are in conflict with each other.<sup>ii</sup> First, Duke suggests that future Rider AU should “follow the filing schedules used for electric Rider DR-IM (Distribution Reliability Infrastructure Modernization Rider), in light of the many elements that rider AU and Rider DR-IM have in common.”<sup>iii</sup> Alternatively, Duke states that it “would file its first pre-filing for recovery of Rider AU rates in November 2012, with an updated filing in February 2013.”<sup>iv</sup>

Changing the timing of the filing of Rider AU from the status quo is problematic. Riders AU and DR-IM include costs that have been allocated from joint and common sources. A change in the timing for filing Rider AU would cause a time period mismatch in the allocation of joint and common GridMod costs. Staff recommends that Rider AU continue to be filed at the same time as Rider DR-IM.

### **GridMod–related adjustments**

Pursuant to the Stipulation of the Mid-deployment review of Duke's GridMod in Case No. 10-2326-GE-RDR, Duke was granted permission to “include (1) all prudently incurred GridMod costs allocable to gas and (2) a guaranteed level of savings,”<sup>v</sup> in its next base rate case. Many of the 2011 costs (or savings) associated with GridMod are reflected in both this gas rate case (Case No. 12-1685-GA-AIR), and in the 2011 Rider AU (Case No. 12-1811-GE-RDR).

Staff is recommending that certain GridMod costs be recovered through base rates while other costs should be recovered through Rider AU. Staff agrees that base rates

---

<sup>i</sup> “Addbacks” refers to reductions in O&M expense levels that are reflected in the rate case filing, which if not netted, would represent double counting of the benefits negotiated in 10-2326-GE-RDR, and included in rates resulting from that case.

<sup>ii</sup> Case No. 12-1685-GA-AIR, Volume 14, Schedule Alt Reg A, pages 8-9.

<sup>iii</sup> Id

<sup>iv</sup> Id

<sup>v</sup> Case No. 10-2326-GE-RDR, Stipulation and Recommendation, pg. 8, paragraph h.

established in the current rate case should include net plant investment in the GridMod as of date certain March 31, 2012, and should also include the annual level of depreciation and associated taxes for the year 2012.

Staff believes that it would be more appropriate to continue to recover through Rider AU some of the prudently incurred expenses associated with the GridMod. Staff is recommending the following adjustments to the GridMod-related expenses requested by Duke in this rate case.

- Schedule C-3.25 --- Removal of the Amortized 2011 and 2012 Deferred GridMod O&M and Depreciation Expenses (Schedule C-3.25) from the proposed base rates, with a recommendation that prudently incurred Deferred GridMod O&M and Depreciation expenses be recovered through future Rider AU.
- Elimination of the \$2,055,444 (Account 407409), which is inappropriately included in the calculation of the GridMod Savings Adjustment on Schedule WPC-3.26a.
- Elimination of the \$2,055,444 (Account 407409) that appears on Schedule C-2 under the "unadjusted revenue and expenses" column in Line 25 "amortization of deferred expenses," (these dollars are forwarded from Schedule C-2.1).
- Removal of the expenses of the Gas Furnace Replacement program (Schedule C-3.28). The expenses associated with this program should continue to be recovered through Rider AU and not memorialized in base rates.

On Schedules C-3.20 and WPC-3.20b, Duke included GridMod PISCC in an amount equal to that which is in the 2011 Rider AU (Case No. 12-1811-GE-RDR) plus PISCC for the 2012 GridMod investments through date certain. Staff agrees that these GridMod PISCC expenses should remain in the proposed base rates as filed, because they are a result of GridMod plant investment, which is being rolled into base rates.

Some of the GridMod costs embedded in this rate case need to reflect adjustments being recommended by Staff in the 2011 GridMod Rider Case No. 12-1811-GE-RDR. These recommended adjustments are repeated for reference below, and one of them is updated to reflect that the base rate case includes plant and investment through the date certain, whereas Rider AU as reflected in Case No. 12-1811 includes plant and equipment only through the end of 2011. These recommendations include the following:

- A \$367,425 reduction to plant account 303 to correct an error in allocating costs between electric and gas;

- A \$45,425 reduction also to plant account 303 to correct similar error in allocating costs between electric and gas;
- A \$39,287 reduction to plant account 397 to correct an adjustment error involving a stores loading charge; and
- A \$1,069,188 reduction also to plant account 397 to remove the cost of communication equipment (gas modules) not used and useful as of March 31, 2012.

The details of the above adjustments are discussed in the Staff Comments filed in Case No. 12-1811-GE-RDR.

### **Modifying Rider AU when Base Rates from this Case become effective**

Currently, customers are being billed for costs associated with the GridMod through the Rider only. Should the Commission approve Staff's recommendations included herein, some of the costs of the GridMod would be recovered through the Rider and other costs would be recovered in the new base rates. In order to avoid double recovery,<sup>i</sup> the Rider AU rate that is in effect when new base rates from this rate case go into effect will need to be modified to recognize that some of the costs of the GridMod are now going to be recovered through the new base rates. The Commission should require Duke to make a supplemental filing in Case No. 12-1811-GE-RDR in order to assure that base rates and rider rates are perfectly complementary.

Costs that should be removed from the Modified Rider AU when GridMod costs supported by Staff are rolled into base rates include:

- Schedule 1, Line 6, Net Rate Base will equal \$0 (all rate base items would be included in base rates)
- Schedule 8, Annualized Provision for Depreciation for Additions
- Schedule 9, Annualized Amortization of PISCC
- Schedule 11, Annualized Property Tax Expense

Prudent GridMod costs that should remain in this Rider appear on:

- Schedule 10, Deferred O&M Expense and Carrying Costs
- Schedule 12, Incremental O&M Savings (Benefits of GridMod)
- Schedule 13, Gas Furnace Program Incentive Payments and Administrative Expenses
- Schedule 15, Undercollection of 2010 Revenue Requirement

---

<sup>i</sup> Case No. 10-2326-GE-RDR, Stipulation and Recommendation, pg. 10, paragraph I.

Assuming these recommendations are approved, the future Rider AU, reflecting costs for the year 2012, would include the incremental differences between asset balances at Year End 2012 and March 31, 2012, the date certain used in the current rate case. The future Rider AU would also include annual levels of all expenses typically requested through this rider, net of any expenses included in base rates. Future Rider AU would also include the guaranteed level of savings<sup>i</sup> agreed upon in the Stipulation reached in Case No. 10-2326-GE-RDR, net of savings reflected in this rate case.

---

<sup>i</sup> Case No. 10-2326-GE-RDR, Stipulation and Recommendation, pg. 8, paragraph h

## **DUKE MANAGEMENT AND OPERATIONS REVIEW**

Section 4909.154 of the Ohio Revised Code states that the Public Utilities Commission shall consider the management policies, practices, and organization of public utilities infixing the just, reasonable, and compensatory rates, joint rates, tolls, classification, charges of rentals to be observed and charged for service of any public utility.

Section 4901-7 of the Ohio Administrative Code requires medium and large utilities to include in their rate filings a concisely written summary of their management policies, practices and organization. Among other things, the summary is to include a discussion of policy and goal setting, strategic and long range planning, organization structure, decision making and controlling, and communications for the Company's executive management process (Schedule S-4.1) as well as for functional areas common to most electric utility companies (Schedule S-4.2).

Staff routinely reviews the S-4.1 and S-4.2 schedules, applicant performance, and various events relating to the applicant's management. As a result of these review activities, Staff selects certain management topics for rate case reporting. In this Duke rate case, Staff reports on the Applicant's cost allocation methodology and Information Technology (IT) planning process.

## **COST ALLOCATION METHODOLOGY**

In the Duke Electric Security Plan proceeding, Case No. 08-920-EL-SSO, a Stipulation and Recommendation was entered into among the parties to the case. Paragraph 33 of the Stipulation provides for an annual compliance audit of Duke's Corporate Separation Plan, including, but not limited to, a review of its Cost Allocation Manual. In a March 2009 stipulated agreement in the Duke electric distribution rate case, Case No. 08-709-EL-AIR, the parties agreed to, and the PUCO adopted, Staff's recommendation that the scope of the compliance audit be expanded to include the documentation, examination, and testing of all allocation methods and factors that are used to assign costs to Duke. In Case No. 09-495-EL-UNC the Commission selected Silverpoint Consulting LLC and Vantage Consulting, Inc. (Silverpoint) to assist the Commission with the evaluation of Duke's corporate separation plan. Silverpoint completed its audit and submitted its Report of Investigation on March 29, 2010. On April 11, 2011, the Commission issued its Opinion and Order. Based on the auditor's evaluation and the Commission's directives, which Duke had committed to satisfy, the Commission concluded that Duke had, in all material respects, implemented its corporate separation plan in compliance with Section 4928.17, Revised Code, and Chapter 4901:1-37, Ohio Administrative Code.

Part of Staff's audit relied on Silverpoint's assessment of Duke's allocation methodology. The report submitted by Silverpoint identified six recommendations of which one was related to cost allocation methodology (page 6)<sup>1</sup>. Although Silverpoint did not uncover any major problems, Silverpoint did recommend that Duke keep Staff informed of future changes to the cost distribution methods used by Duke Energy, Inc. (Duke Corporate or Service Company). Silverpoint stated that prior audits of Duke's affiliate transactions and cost distribution methods resulted in three recommendations related to the methods by which the Service Company distributes its costs, namely, it should: narrow the use of the three-part formula general allocator; eliminate the effect of spreading overhead costs from the calculation of allocation percentages; and develop a method to fairly assign the Service Company overhead costs. According to Silverpoint, Duke has implemented changes to address these three concerns beginning in 2010. The Silverpoint audit found no material weakness in the methodology therefore, Staff, in Data Request 17, asked Duke to explain any changes to the allocation methodology. Duke stated that no major changes had occurred and that a new service company overhead loader approach was implemented in 2010. The new method loads an overhead percentage on all direct labor. The intent of this is to have overhead related to Service Company employees follow where the Service Company labor is charged and in the process reduce the amount that is allocated on the three factor basis.

The Duke Corporate Accounting group is responsible for initially developing and annually reviewing the allocation factors. The annual review is normally done during the budget process with data from the year ended June. Any new or revised allocation factors are then implemented at the beginning of the next year.

Staff compared the allocation methods reported in the Silverpoint audit to the allocation methodologies used in the current test year. In both cases Duke identified the same 20 allocation methodologies such as Number of Employees Ratio, Miles of Distribution Lines Ratio, Number of Personal Computer Workstations Ratio, etc. The allocation methods have remained the same.

Duke outlined 23 Service Company functions that accumulate costs, many of which the Service Company separates further into sub-functions. Where identifiable, costs are directly assigned or distributed to Client Companies or other Service Company functions. For costs accumulated for services of a general nature that cannot be directly assigned or distributed, they are allocated based on the function and associated allocation method(s) assigned to each of the 23 functions. For example, the Service Company function of Human Resources is allocated to the Client Companies based on

---

<sup>1</sup> Case No. 09-0495-EL-UNC (Silverpoint Compliance Audit Report)

the Number of Employees Ratio while the Rates function is allocated to the Client Companies based on the Sales Ratio.

#### **DUKE SERVICE COMPANY FUNCTIONS**

Information Systems	Meters	Transportation
System Maintenance	Marketing/Customer Relations	Transmission/Distribution Engineering/Construction
Power Engineering & Construction	Human Resource	Materials Management
Facilities	Accounting	Power & Gas Planning & Operations
Public Affairs	Legal	Rates
Finance	Rights of Way	Internal Auditing
Environmental Health & Safety	Fuels	Investor Relations
Planning	Executive	

The weighting of allocation factors is reviewed annually by the Duke Corporate Accounting Group with the purpose of assigning costs to the business units or functions. This is done as certain variables used in the calculation may change, for example the number of employees, customers, or meters can change from year to year. Baring any major organization change, changes to allocation percentages should be minimal.

Staff reviewed the Service Company cost allocation details for years 2011 and 2012. This schedule shows each of the 23 business functions and each of the different allocations within each sub-function and the percentage allocated to Duke.

A total of 74 allocation percentages were reviewed and compared for years 2011 and 2012.

## FINDINGS AND RECOMMENDATIONS

Staff reviewed the 2011 through June 2012 direct and indirect costs that were charged to Duke.

Analysis of this data shows that 41% of the 2011 charges were allocated and that 40% of the charges for the first half of 2012 were allocated.

Duke Gas	2011	2012
Allocated	41%	40%
Direct	59%	60%

The comparison of 74 sub-function allocation percentages between 2011 and 2012 found no significant increase in allocation percentage between the two years. The percent changes in the total dollars allocated to Duke between 2011 and 2012 were not significant. The trend for the first six months of 2012 indicates a 1% reduction in allocation costs. The number of business functions and allocation methodologies remained the same as was found by Silverpoint in the 2010 corporate separation audit.

Duke initially reported different allocation methodologies between the electric distribution systems and gas Distributions system. Stating that electric distribution systems are allocated based on Miles of Distribution Lines Ratio while gas distribution systems are allocated based on Labor Dollars Ratio. Upon examination, Duke stated they do not have an allocation currently that allocates to the gas distribution system maintenance either based on labor dollars or another allocation basis. All costs are directly charged. Therefore, Staff recommends that Duke remove this method of allocation from their Cost Allocation Manual and any other document that references this allocation method for gas distribution systems.

After a thorough review of the application and supporting information, Staff finds Duke's cost allocation methodology is appropriate and the allocations of indirect costs to Duke appear to be reasonable.



## **INFORMATION TECHNOLOGY PLANNING.**

Duke's Service Company Information Technology Department (ITD) provides technology services to Duke. The Information Technology Department is comprised of nine divisions:

- Enterprise Application and Vendor Management Office;
- Data Management and Architecture;
- IT Project Management Office (PMO) and Resource Management;
- Duke Energy International Information Technology;
- Operations and Infrastructure;
- Operations Applications;
- Generation IT;
- Performance and Project Management.

The ITD utilizes a planning process consisting of three levels; Strategic Planning, Business Unit IT Planning, and Enterprise Technology Planning. Strategic Planning is conducted annually to refine the IT vision, strategy, and major initiatives for a three to five year period. Business Unit IT Planning is conducted to identify focus areas, initiatives and projects to be undertaken during the next twelve months. Enterprise Technology Planning is an aggregation of IT initiatives needed to enable Business Unit IT Planning needs along with enterprise wide IT needs identified within the Strategic Planning. Each year the results of this planning process are incorporated into a document that tracks requested projects called the Annual IT Business Plan. This Annual IT Business Plan identifies areas of focus, initiatives, and projects for the next twelve month period.

One of the Departments within Duke that provides input into the Business Unit IT Planning and Enterprise Technology Planning is the Retail Customer Products and Services (RCPS). RCPS is comprised of the following seven areas:

- Call Center Operations
- Customer Systems and Processes
- Revenue Services
- Smart Grid Innovation and Energy Systems
- Large Business Customers
- Marketing and Customer Experience
- Customer Strategy and Innovation

The RCPS creates an annual business plan that defines, for a three year planning period, the activities to support Duke. This plan outlines the resources needed to support basic operations (customer service, billing, etc.) and the products and services as enabled by technology. One example of RCPS strategy within the business plan is the use of customer surveys by Call Center Operations to guide development of additional services.

Staff requested copies of the Ohio Retail Customer Products and Services Technology Plan for 2011 and 2012. The purpose of this request was to review Ohio impacted projects and determine the cost-related decision making process for approving and/or denying projects. The 2011/ 2012 Ohio RCPS project portfolio consists of 10 Ohio only projects and 26 Ohio impacted projects.

## **FINDINGS**

Staff randomly selected two Ohio only RCPS projects and three Ohio impacted RCPS projects for a review of the following:

- Business case documentation
- Original budget amount
- Actual cost to date
- Variance justification
- Cost control/progress reports

The review of the business case documentation found that all but one of the requested projects were related to the Duke Smart Grid project, whose justification and cost tracking are captured under the Smart Grid project. Reviews of items related to Smart Grid are done separately within the Commission-approved Duke Smart Grid Rider and therefore no further review occurred here.

The non-Smart Grid project for Duke was justified in the business case document as needing new test data to support the testing of Customer Service Systems. The current test data was collected in 2009 and no longer meets the need of IT or business operations. Many major functions or applications have been implemented since 2009 or have changed significantly. Project goals, objectives, and deliverables were sufficiently identified within the business case document. The intangible benefit was listed as removal of the current system used for creating test data and replacing it with an existing tool that extracts data from existing systems into a test database. In addition, project teams will have more readily available current data for testing thus reducing the time and resources needed to create test data for various projects.

A review of the project status report found that the project is on target with no budget overruns.

Based on a review of the documentation provided, Duke appears to have a reasonable and enforced formal methodology for requesting and managing projects. Creating a fully justified business case document is the foundation for project success as it provides the what, why, where, who, when, and how of a project. The object is to secure senior management buy-in and project approval. The business case information also provides an estimated timeline and estimated budget, which can be used by the Project Management Office to create and execute a detailed project plan.

Staff recommends that Duke continue the use of the business case document for requesting Information Technology services and tracking approved projects timeline and budget.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
OVERALL FINANCIAL SUMMARY  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE A-1  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	DESCRIPTION	Supporting Schedule Reference	Applicant	Staff	
				Lower Bound	Upper Bound
1	Rate Base	B-1	891,013,614	881,961,770	881,961,770
2	Current Operating Income	C-1	43,639,349	70,347,005	70,347,005
3	Earned Rate of Return (Line 2 / Line 1)		4.90%	7.98%	7.98%
4	Requested Rate of Return	D-1A	8.13%	7.19%	7.73%
5	Required Operating Income (Line 1 x Line 4)		72,439,407	63,413,051	68,175,645
6	Operating Income Deficiency (Line 5 - Line 2)		28,800,058	(6,933,954)	(2,171,360)
7	Gross Revenue Conversion Factor	A-2	1.5488809	1.5468532	1.5468532
8	Revenue Deficiency (Line 6 x Line 7)		44,607,860	(10,725,809)	(3,358,775)
9	Revenue Increase Requested / Recommended		44,607,929	(10,725,809)	(3,358,775)
10	Adjusted Operating Revenues	C-1	246,539,382	382,716,847	382,716,847
11	Revenue Requirements (Line 9 + Line 10)		291,147,242	371,991,038	379,358,072
12	Percent Increase (Line 9 / Line 11)		18.09%	-2.80%	-0.88%

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
COMPUTATION of GROSS REVENUE CONVERSION FACTOR  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE A-2  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPA-2a thru WPA-2e

LINE NO.	DESCRIPTION	PERCENT OF INCREMENTAL GROSS REVENUE
1	Operating Revenues	100.000000%
2		
3	Uncollectibles	0.5425%
4		
5	Income before Federal Income Tax (Line 1 - Line 3)	99.45750%
6		
7	Federal Income Tax (35% x 99.458%)	34.81013%
8		
9	Operating Income Percentage (Line 5 - Line 7)	64.64738%
10		
11	Gross Revenue Conversion Factor (100% / 64.647%)	1.5468532

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
JURISDICTIONAL RATE BASE SUMMARY  
AS OF MARCH 31, 2012

SCHEDULE B-1  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	RATE BASE COMPONENT	Supporting Schedule Reference	Applicant Proposed Amount	Staff Proposed Amount
1	Plant In Service	B-2	\$ 1,629,640,883	\$ 1,622,852,609
2	Reserve for Accumulated Depreciation	B-3	(450,909,840)	(447,034,273)
3	Net Plant In Service (Line 1+ Line 2)		1,178,731,043	1,175,818,336
4	Construction Work in Progress	B-4	0	0
5	Cash Working Capital Allowance	B-5	0	0
6	Material and Supplies	B-5	6,139,137	0
7	Other Items:			
8	Customer Advances for Construction	B-6	(3,597,473)	(3,597,473)
9	Customer Service Deposits	B-6	(8,453,180)	(8,453,180)
10	Contributions in Aid of Construction (a)	B-6	0	0
11	Postretirement Benefits	B-6	(14,645,755)	(14,645,755)
12	Investment Tax Credits	B-6	(6,554)	(6,554)
13	Deferred Income Taxes	B-6	(282,950,314)	(282,950,314)
14	Other Rate Base Adjustments	B-6	15,797,710	15,796,710
15	Jurisdictional Rate Base (Line 3 thru Line 14)		\$ 891,014,614	\$ 881,961,770

(a) Contributions in aid of construction are already netted against gross plant per FPC Order No. 490.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
**PLANT IN SERVICE SUMMARY BY MAJOR PROPERTY GROUPINGS**  
AS OF MARCH 31, 2012

SCHEDULE B-2  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): Schedule B-2.1

LINE NO.	MAJOR PROPERTY GROUPINGS	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
		\$		\$	\$	\$
1	Production	11,408,389	100.00	11,408,389	0	11,408,389
2	Distribution	1,506,169,486	100.00	1,506,169,486	(4,745,042)	1,501,424,444
3	General	51,239,806	100.00	51,239,806	(1,521,325)	49,718,481
4	Common (Allocated to Gas)	61,160,507	100.00	61,160,507	(859,212)	60,301,295
5	Other (specify)					
6	TOTAL	1,629,978,188		1,629,978,188	(7,125,579)	1,622,852,609

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS  
AS OF MARCH 31, 2012  
MANUFACTURED GAS PRODUCTION PLANT

SCHEDULE B-2.1  
PAGE 1 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2, Applicant Schedule B-2.3

LINE NO.	FERD. COMPANY		ACCOUNT TITLE	TOTAL COMPANY		ALLOCATION %	ALLOCATED TOTAL		ADJUSTMENTS		ADJUSTED JURISDICTION	
	ACCT. NO.	ACCT. NO.		\$	\$		\$	\$	\$	\$	\$	\$
1	304	2040	Land and Land Rights	424,642	100.00		424,642				424,642	
2	304	2041	Rights of Way	4,147	100.00		4,147				4,147	
3	305	2050	Structures & Improvements	3,793,937	100.00		3,793,937				3,793,937	
4	311	2110	Liquefied Petroleum Gas Equipment	7,155,568	100.00		7,155,568				7,155,568	
5	320	2200	Other Equipment	30,095	100.00		30,095				30,095	
6			Total Manufactured Gas Production Plant	11,408,389			11,408,389				11,408,389	



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS  
AS OF MARCH 31, 2012  
DISTRIBUTION PLANT

SCHEDULE B-2.1  
PAGE 2 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2, Applicant Schedule B-2.3

LINE NO.	F.E.R.C. COMPANY		ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
	ACCT. NO.	ACCT. NO.						
				\$		\$	\$	\$
1	374	2740	Land and Land Rights	133,008	100.00	133,008		133,008
2	374	2741	Rights of Way	8,980,609	100.00	8,980,609		8,980,609
3	374	2742	City Gate Check Station	3,663	100.00	3,663		3,663
4	375	2750	Structures & Improvements	1,534,497	100.00	1,534,497		1,534,497
5	376	2761, 2764	Mains - Cast Iron & Copper	8,243,290	100.00	8,243,290		8,243,290
6	376	2762, 65, 67, 68	Mains - Steel	374,815,983	100.00	374,815,983		374,815,983
7	376	2763, 2768	Mains - Plastic	567,049,597	100.00	567,049,597		567,049,597
8	378	2780	System Meas. & Reg. Station Equipment	17,649,106	100.00	17,649,106		17,649,106
9	378	2781	System Meas. & Reg. Station Equip-Electronic	3,815,789	100.00	3,815,789		3,815,789
10	378	2782	District Regulating Equipment	4,571,843	100.00	4,571,843		4,571,843
11	379	2790	Meas. & Reg.- City Gate	263,232	100.00	263,232		263,232
12	380	2801	Services- Cast Iron & Copper	7,454,696	100.00	7,454,696		7,454,696
13	380	2802, 2804, 2805	Services-Steel	18,245,672	100.00	18,245,672		18,245,672
14	380	2803, 05, 06, 07	Services-Plastic	369,234,614	100.00	369,234,614		369,234,614
15	381	2810, 2811	Meters	46,704,706	100.00	46,704,706		46,704,706
16	381	2812	Utility of the Future Meters	0	100.00	0		0
17	382	2820, 2821	Meter Installations	28,277,340	100.00	28,277,340		28,277,340
18	383	2830, 2831	House Regulators	22,670,684	100.00	22,670,684		22,670,684
19	384	2840, 2841	House Regulator Installations	17,296,036	100.00	17,296,036		17,296,036
20	385	2850	Large Industrial Meas. & Reg. Equipment	2,802,485	100.00	2,802,485		2,802,485
21	385	2851	Large Industrial Meas. & Reg. Equipment - Comm	728,946	100.00	728,946		728,946
22	387	2870	Other Equipment - Other	210,891	100.00	210,891		210,891
23	387	2871	Street Lighting Equipment	737,757	100.00	737,757		737,757
24	388		Gas ARO	4,745,042	100.00	4,745,042	(4,745,042)	0
25			Total Distribution Plant	1,506,169,486		1,506,169,486	(4,745,042)	1,501,424,444

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS  
AS OF MARCH 31, 2012  
GENERAL PLANT

SCHEDULE B-2.1  
PAGE 3 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2, Applicant Schedule B-2.3

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$		\$	\$	\$
1	000	2030	Miscellaneous Intangible Plant	14,539,717	100.00	14,539,717		14,126,867
2	389	2890	Land	0	100.00	0	(412,850)	0
3	390	2900	Structures & Improvements	2,065,248	100.00	2,065,248		2,065,248
4	391	2910	Office Furniture & Equipment	596,371	100.00	596,371		596,371
5	391	2911	Electronic Data Processing Equipment	1,311,766	100.00	1,311,766		1,311,766
6	392	2920	Transportation Equipment	24,590	100.00	24,590		24,590
7	392	2921	Trailers	644,188	100.00	644,188		644,188
8	394	2940	Tools, Shop & Garage Equipment	8,167,347	100.00	8,167,347		8,167,347
9	395	2950	Laboratory Equipment	234,056	100.00	234,056		234,056
10	396	2960	Power Operated Equipment	219,039	100.00	219,039		219,039
11	397	2970	Communication Equipment	23,437,484	100.00	23,437,484	(1,108,475)	22,329,009
12			Total General Plant	51,239,806		51,239,806	(1,521,325)	49,718,481
13			Total Gas Plant	1,568,817,681		1,568,817,681	(6,266,367)	1,562,551,314

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS  
AS OF MARCH 31, 2012  
COMMON PLANT - EXCLUDING SMARTGRID

SCHEDULE B-2.1  
PAGE 4 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2, Applicant Schedule B-2.3

LINE NO.	FERC. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$		\$	\$	\$
1		1030	Miscellaneous Intangible Plant	121,520,890	100.00	121,520,890		121,520,890
2		1890	Land and Land Rights	2,121,647	100.00	2,121,647		2,121,647
3		1891	Rights of Way	37,969	100.00	37,969		37,969
4		1900	Structures & Improvements	129,745,708	100.00	129,745,708		124,713,920
5		1910	Office Furniture & Equipment	4,220,949	100.00	4,220,949	(5,031,788)	4,214,355
6		1911	Electronic Data Processing - Non SmartGrid	693,843	100.00	693,843	(6,594)	693,843
7		1920	Transportation Equipment	85,311	100.00	85,311		85,311
8		1921	Trailers	474,273	100.00	474,273		474,273
9		1930	Stores Equipment	189,750	100.00	189,750		189,750
10		1940	Tools, Shop & Garage Equipment	1,829,999	100.00	1,829,999	(52,910)	1,777,089
11		1950	Laboratory Equipment	23,250	100.00	23,250		23,250
12		1960	Power Operated Equipment	153,899	100.00	153,899		153,899
13		1970	Communication Equipment - Non SmartGrid	27,931,369	100.00	27,931,369	(8,238)	27,923,131
14		1980	Miscellaneous Equipment	429,603	100.00	429,603	(8,081)	421,522
15		1990, 1991	ARO Common General plant	99,735	100.00	99,735	(99,735)	0
16			Total Common Plant	289,558,195		289,558,195	(5,207,346)	284,350,849
17	16.50%		Common Plant Allocated to Gas (excluding SG)	47,777,102		47,777,102	(859,212)	46,917,890

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS  
AS OF MARCH 31, 2012  
COMMON PLANT - SMARTGRID

SCHEDULE B-2.1  
PAGE 5 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2, Applicant Schedule B-2.3

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ADJUSTED ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$				\$
1		1911	Electronic Data Processing - SmartGrid	113,194	100.00	113,194	0	113,194
2		1970	Communication Equipment - SmartGrid	27,261,331	100.00	27,261,331	0	27,261,331
3			Total Common Plant - SmartGrid	27,374,525		27,374,525	0	27,374,525
4		(1)	Common Plant Allocated to Gas - SmartGrid	13,383,405		13,383,405	0	13,383,405
5			Total Common Plant	316,932,720		316,932,720	(5,207,346)	311,725,374
6			Total Common plant allocated to Gas	61,160,507		61,160,507	(859,212)	60,301,295
7			Total Gas Plant Including Allocated Common	1,629,978,188		1,629,978,188	(7,125,579)	1,622,852,609

(1) Allocation of Common Plant / SmartGrid to gas determined by SmartGrid filings

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADJUSTMENTS TO PLANT IN SERVICE  
AS OF MARCH 31, 2007

SCHEDULE B-2.2  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.2a through B-2.5d

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL STAFF ADJUSTMENT \$	ALLOCATION %	JURISDICTIONAL ADJUSTMENT \$
1			DISTRIBUTION PLANT			
2		388	Gas ARO	(4,745,042)	100.00	(4,745,042) (a)
3			Total Distribution Plant	<u>(4,745,042)</u>		<u>(4,745,042)</u>
4			GENERAL PLANT			
5		2030	Miscellaneous Intangible Plant	(412,850)	100.00	(412,850) (b)
6		397	Communication Equipment	<u>(1,108,475)</u>	100.00	<u>(1,108,475) (c)</u>
7			Total General Plant	<u>(1,521,325)</u>		<u>(1,521,325)</u>
8			COMMON PLANT			
9		1900	Structures & Improvements	(1,968,452)	100.00	(1,968,452) (d)
10		1900	Structures & Improvements - Golf Course at Hartwell	(171,131)	100.00	(171,131) (e)
11		1900	Structures & Improvements - Envision Center	(1,726,080)	100.00	(1,726,080) (f)
12		1900	Structures & Improvements -Holiday Park	(2,509)	100.00	(2,509) (g)
13		1900	Structures & Improvements -Fourth & Walnut (Clonay)	(202,197)	100.00	(202,197) (g)
14		1900	Structures & Improvements -Atrium II	(961,419)	100.00	(961,419) (g)
15		1910	Office Furniture & Equipment	(6,594)	100.00	(6,594) (d)
16		1940	Tools, Shop & Garage Equipment	(52,910)	100.00	(52,910) (d)
17		1970	Communication Equipment	(8,238)	100.00	(8,238) (d)
18		1980	Miscellaneous Equipment	(8,081)	100.00	(8,081) (d)
19		1990, 1991	ARO Common General Plant	(99,735)	100.00	(99,735) (h)
20			Total Common Plant	<u>(5,207,346)</u>		<u>(5,207,346)</u>
21		16.50%	Common Allocated to Gas	<u>(859,212)</u>		<u>(859,212)</u>
22			TOTAL PLANT ADJUSTMENTS INCLUDING ALLOCATED COMMON	<u>(7,126,579)</u>		<u>(7,126,579)</u>

- (a) See Staff Data Request 50 - Supplemental  
 (b) Duke Rider AU - Company Allocation Errors 1 and 2 (See Staff Text)  
 (c) Duke Rider AU-Adjustment for Stores Loading and Adjustment for Uninstalled Gas Modules (See Staff Text)  
 (d) Applicant's Exclusion of the Hartwell Recreation Facilities.  
 (e) See Staff Data Request 128 in Case No. 12-1682-EL-AIR  
 (f) See Staff Data Request 131 in Case No. 12-1682-EL-AIR  
 (g) See Staff Data Request 97 in Case No. 12-1682-EL-AIR  
 (h) See Staff Data Request 78 in Case No. 12-1682-EL-AIR

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1688-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

WORK PAPER REFERENCE NO(S):

SCHEDULE B-2.5a  
PAGE 1 OF 5

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE	EXPENSES	
							AMOUNT	NO.	DESCRIP.
1	1900	Structures & Improvements	1944	5,857	2,876	3,181			Hartwell Recreation Facilities
2			1948	730	314	416			
3			1949	41,064	17,379	23,685			
4			1950	2,088	870	1,218			
5			1951	174,973	71,891	103,282			
6			1952	5,459	2,200	3,259			
7			1953	5,774	2,288	3,486			
8			1954	874	340	534			
9			1955	701	268	433			
10			1957	291,203	107,530	183,673			
11			1960	11,628	4,058	7,570			
12			1961	4,663	1,596	3,067			
13			1962	1,565	525	1,040			
14			1965	783	247	536			
15			1966	87,744	27,074	60,670			
16			1972	1,765	473	1,292			
17			1974	4,382	1,116	3,266			
18			1975	4,990	1,237	3,753			
19			1976	3,610	870	2,740			
20			1978	491	112	379			
21			1980	5,637	1,207	4,430			
22			1981	3,018	626	2,392			
23			1982	27,381	5,494	21,887			
24			1983	16,375	3,175	13,200			
25			1984	1,683	315	1,368			
26			1985	8,727	1,574	7,153			
27			1986	7,578	1,316	6,262			
28			1988	18,636	2,985	15,651			
29			1989	70,136	10,761	59,375			
30			1990	1,727	253	1,474			
31			1991	29,559	4,137	25,422			
32			1992	44,047	5,867	38,180			
33			1994	101,176	12,112	89,064			
34			1995	4,931	557	4,374			
35			1998	132,008	12,242	119,764			
36			1999	253,156	21,769	231,387			
37			2000	51,576	4,087	47,489			
38			2001	70,482	5,110	65,372			
39			2002	48,954	3,219	45,735			
40			2003	33,161	1,957	31,204			
41			2005	17,609	802	16,807			
42			2006	60,849	2,360	58,489			
43			2008	124,449	3,148	121,301			
44			2009	135,502	2,513	132,989			
45			2010	49,752	587	49,165			
46		Total		1,988,452	351,037	1,617,415			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.6a  
PAGE 2 OF 5

WORK PAPER REFERENCE NO(S):

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE	EXPENSES	
							AMOUNT	NO.	DESCRIP.
1	1910	Office Furniture & Equipment	1992	2,507	(1,556)	4,063			Hartwell Recreation Facilities
2			2008	4,087	(482)	4,569			
3		Total		6,594	(2,038)	8,632			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.5a  
PAGE 3 OF 5

WORK PAPER REFERENCE NO(S):

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE	EXPENSES	
							ACCT. NO.	AMOUNT	DESCRIP.
1	1940	Tools, Shop & Garage	1988	1,276	917	359			Hartwell Recreation Facilities
2		Equipment	1989	11,754	8,096	3,658			
3			1990	4,809	3,166	1,643			
4			1991	18,522	11,635	6,887			
5			1993	16,549	9,394	7,155			
6		Total		52,910	33,208	19,702			



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.5a  
PAGE 4 OF 6

WORK PAPER REFERENCE NO(S):

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCU. DEP.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE	EXPENSES	
							AMOUNT	NO.	
1	1970	Communication Equipment	2009	8,238	1,232	7,006			Hartwell Recreation Facilities
2		Total		8,238	1,232	7,006			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.6a  
PAGE 5 OF 5

WORK PAPER REFERENCE NO(S)::

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE & EXPENSES ACCT. NO.	AMOUNT	
1	1980	Miscellaneous Equipment	1993	5,259	5,179	80			Hartwell Recreation Facilities
2			2011	2,922	111	2,711			
3		Total		8,081	5,290	2,791			
4		Grand Total - Hartwell Recreation Facilities		2,044,275	388,729	1,655,546			
5							408	0	Expenses related to Hartwell Recreation Facilities
6							920	0	
7							921	0	
8							926	0	
9							935	0	
10								<u>0</u>	Total

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1682-EL-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

WORK PAPER REFERENCE NO(S):

SCHEDULE B-2.5b  
PAGE 1 OF 1

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR REVENUE & EXPENSES AMOUNT	ACGT. NO.	DESCRIP.	REASON FOR EXCLUSION
1	1900	Structures & Improvements		171,131	60,252	110,879				Hartwell Golf Course (a)
2		Total		171,131	60,252	110,879				
3	1900	Structures & Improvements	2011	1,726,080	681,977	1,044,103				Envision Center (b)
4		Total		1,726,080	681,977	1,044,103				
5	1900	Structures & Improvements	2004	2,509	2,509	0				Leasehold Improvements-Holiday Park (c)
6		Total		2,509	2,509	0				
7	1900	Structures & Improvements		202,197	154,281	47,916				Leasehold Improvements-Fourth & Walnut (Clapay) (c)
8		Total		202,197	154,281	47,916				
9	1900	Structures & Improvements		961,419	961,419	0				Leasehold Improvements-Atrium II (c)
10		Total		961,419	961,419	0				

- (a) To eliminate the Golf Course at Hartwell (See Data Request 129 in Case No. 12-1682-EL-AIR).  
(b) To eliminate the Envision Center (See Data Request 131 in Case No. 12-1682-EL-AIR).  
(c) To eliminate items associated with Leasehold Improvements no longer used & useful (See Data Request 97 in Case No. 12-1682-EL-AIR)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.5c  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR		REASON FOR EXCLUSION
							REVENUE & EXPENSES	AGCT.	
							AMOUNT	NO.	DESCRIP.
1	2880	Gas ARO		4,745,042	3,504,391	1,240,651			Asset Retirement Obligation (a)
2		Total		<u>4,745,042</u>	<u>3,504,391</u>	<u>1,240,651</u>			
3	1990,1991	ARO - Common General Plant		99,735	117,273	(17,538)			Asset Retirement Obligation (b)
4		Total		<u>99,735</u>	<u>117,273</u>	<u>(17,538)</u>			

- (a) To eliminate the Asset Retirement Obligation (See the Applicant's response to Staff DR 50 - Supplemental)  
(b) To eliminate Common Plant Retirement Work in Progress-ARO (See Data Request 78 in Case No. 12-1682-EL-AIR)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY EXCLUDED FROM RATE BASE  
(FOR REASONS OTHER THAN RATE AREA ALLOCATION)  
AS OF MARCH 31, 2012

SCHEDULE B-2.5d  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):

LINE NO.	COMPANY ACCT. NO.	DESCRIPTION OF EXCLUDED PROPERTY	IN-SERVICE DATE	ORIGINAL COST	ACCUM. DEPRE.	NET ORIGINAL COST	TEST YEAR REVENUE & EXPENSES ACCT. NO.	AMOUNT	DESCRIP.	REASON FOR EXCLUSION
1	2030	Miscellaneous Intangible Plant		412,850	22,458	390,392				Rider AU (a)
2		Total		412,850	22,458	390,392				
3	2970	Communication Equipment		1,108,475	22,395	1,086,080				Rider AU (b)
4		Total		1,108,475	22,395	1,086,080				

- (a) To eliminate Allocation Errors 1 and 2 (See Text)  
(b) To eliminate the Adjustment for Stores Loading and Adjustment for Uninstalled Gas Modules (See Text)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-JR  
ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012  
MANUFACTURED GAS PRODUCTION PLANT

SCHEDULE B-3  
PAGE 1 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Applicant Schedule B-3.3, Staff Schedule B-3.1

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY INVESTMENT	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$	\$		\$	\$	\$
1	304	2040	Land and Land Rights	424,642	(2,080)	100.00	(2,080)		(2,080)
2	304	2041	Rights of Way	4,147	4,116	100.00	4,116		4,116
3	305	2050	Structures & Improvements	3,793,937	3,232,676	100.00	3,232,676		3,232,676
4	311	2110	Liquefied Petroleum Gas Equipment	7,155,568	5,116,220	100.00	5,116,220		5,116,220
5		2200	Other Equipment	30,095	34,582	100.00	34,582		34,582
6		108	Retirement Work in Progress		(1)	100.00	(1)		(1)
7			Total Manufactured Gas Production Plant	11,408,389	8,385,513		8,385,513		8,385,513

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012  
DISTRIBUTION PLANT

SCHEDULE B-3  
PAGE 2 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Applicant Schedule B-3.3, Staff Schedule B-3.1

LINE NO.	P.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY INVESTMENT	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$	\$		\$	\$	\$
1	374	2740	Land and Land Rights	133,008	3,536	100.00	3,536		3,536
2	374	2741	Rights of Way	8,980,809	1,076,651	100.00	1,076,651		1,076,651
3	374	2742	City Gate Check Station	3,663	0	100.00	0		0
4	375	2750	Structures & Improvements	1,534,497	612,865	100.00	612,865		612,865
5	376	2761, 2764	Mains - Cast Iron & Copper	6,243,290	8,025,798	100.00	8,025,798		8,025,798
6	376	2762, 65, 67, 69	Mains - Steel	374,815,983	156,968,786	100.00	156,968,786		156,968,786
7	376	2763, 2766, 2768	Mains - Plastic	567,049,597	90,312,806	100.00	90,312,806		90,312,806
8	378	2780	System Meas. & Reg. Station Equipment	17,649,106	4,803,790	100.00	4,803,790		4,803,790
9	378	2781	System Meas. & Reg. Station Equipment-Elec	3,815,789	3,022,752	100.00	3,022,752		3,022,752
10	378	2782	District Regulating Equipment	4,571,843	2,077,514	100.00	2,077,514		2,077,514
11	379	2790	Meas. & Reg.- City Gate Station	263,232	263,232	100.00	263,232		263,232
12	380	2801	Services-Cast Iron & Copper	7,454,698	9,138,628	100.00	9,138,628		9,138,628
13	380	2802, 2804, 2804	Services-Steel	18,245,672	8,537,968	100.00	8,537,968		8,537,968
14	380	2803, 05, 06, 07	Services-Plastic	369,234,614	88,323,713	100.00	88,323,713		88,323,713
15	381	2810, 2811	Meters	48,704,706	10,617,689	100.00	10,617,689		10,617,689
16	381	2812	Utility of the Future Meters	0	0	100.00	0		0
17	382	2820, 2821	Meier Installations	28,277,340	9,684,673	100.00	9,684,673		9,684,673
18	383	2830, 2831	House Regulators	22,670,684	3,894,571	100.00	3,894,571		3,894,571
19	384	2840, 2841	House Regulator Installations	17,298,036	3,759,582	100.00	3,759,582		3,759,582
20	385	2850	Large Industrial Meas. & Reg. Equipment	2,802,485	1,481,083	100.00	1,481,083		1,481,083
21	385	2851	Large Industrial Meas. & Reg. Equipment - Comm	728,946	420,035	100.00	420,035		420,035
22	387	2870	Other Equipment - Other	210,891	125,955	100.00	125,955		125,955
23	387	2871	Street Lighting Equipment	737,757	518,504	100.00	518,504		518,504
24		108	Retirement Work in Progress		(5,630,083)	100.00	(5,630,083)		(5,630,083)
25	388		Gas ARO	4,745,042	3,504,391	100.00	3,504,391	(3,504,391)	0
26			Total Distribution Plant	1,506,169,486	401,544,439		401,544,439	(3,504,391)	398,040,048

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012  
GENERAL PLANT

SCHEDULE B-3  
PAGE 3 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Applicant Schedule B-3.3, Staff Schedule B-3.1

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$	\$		\$	\$	\$
1	000	2030	Miscellaneous Intangible Plant	14,539,717	8,977,114	100.00	8,977,114		8,954,656
2	389	2890	Land	0	0	100.00	0	(22,458)	0
3	390	2900	Structures & Improvements	2,065,248	670,246	100.00	670,246		670,246
4	391	2910	Office Furniture & Equipment	596,371	256,143	100.00	256,143		256,143
5	391	2911	Electronic Data Processing Equipment	1,311,766	211,602	100.00	211,602		211,602
6	392	2920	Transportation Equipment	24,590	24,590	100.00	24,590		24,590
7	392	2921	Trailers	644,188	445,198	100.00	445,198		445,198
8	394	2940	Tools, Shop & Garage Equipment	8,167,347	3,906,925	100.00	3,906,925		3,906,925
9	395	2950	Laboratory Equipment	234,056	165,130	100.00	165,130		165,130
10	396	2960	Power Operated Equipment	219,039	107,839	100.00	107,839		107,839
11	397	2970	Communication Equipment	23,437,484	1,095,412	100.00	1,095,412	(22,395)	1,073,017
12		108	Retirement Work in Progress		212,586	100.00	212,586		212,586
13			Total General Plant	51,239,806	16,072,785		16,072,785	(44,853)	16,027,932
14			Total Gas Plant	1,568,817,681	426,002,737		426,002,737	(3,549,244)	422,453,493



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012  
COMMON PLANT - EXCLUDING SMARTGRID

SCHEDULE B-3  
PAGE 4 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Applicant Schedule B-3.3, Staff Schedule B-3.1

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY INVESTMENT	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
				\$	\$		\$	\$	\$
1		1030	Miscellaneous Intangible Plant	121,520,890	107,949,729	100.00	107,949,729		107,949,729
2		1890	Land and Land Rights	2,121,847	106,907	100.00	106,907		106,907
3		1891	Rights of Way	37,969	0	100.00	0		0
4		1900	Structures & Improvements	129,745,708	26,847,207	100.00	26,847,207	(2,211,475)	24,635,732
5		1910	Office Furniture & Equipment	4,220,949	(1,746,218)	100.00	(1,746,218)	2,038	(1,744,180)
6		1911	Electronic Data Processing - Non SmartGrid	693,843	274,745	100.00	274,745		274,745
7		1920	Transportation Equipment	85,311	85,311	100.00	85,311		85,311
8		1921	Trailers	474,273	234,543	100.00	234,543		234,543
9		1930	Stores Equipment	189,750	(151,381)	100.00	(151,381)		(151,381)
10		1940	Tools, Shop & Garage Equipment	1,828,989	555,791	100.00	555,791	(33,208)	522,583
11		1950	Laboratory Equipment	23,250	1,293	100.00	1,293		1,293
12		1960	Power Operated Equipment	153,899	62,759	100.00	62,759		62,759
13		1970	Communication Equipment - Non SmartGrid	27,931,369	12,183,687	100.00	12,183,687	(1,232)	12,182,455
14		1980	Miscellaneous Equipment	429,603	131,815	100.00	131,815	(5,290)	126,525
15		1990, 1991	Retirement Work in Progress - ARO	99,735	117,273	100.00	117,273	(117,273)	0
16		108	Retirement Work in Progress		(869,369)	100.00	(869,369)		(869,369)
17			Total Common Plant (excluding SmartGrid)	289,558,195	145,584,092		145,584,092	(2,366,440)	143,217,652
18		16.50%	Common Plant Allocated to Gas (excluding SG)						
19		16.50%	Original Cost Reserve	47,777,102	24,021,375	100.00	24,021,375	(390,463)	23,630,912

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012  
COMMON PLANT - SMARTGRID

SCHEDULE B-3  
PAGE 5 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Applicant Schedule B-3.3, Staff Schedule B-3.1

LINE NO.	FERC ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY INVESTMENT	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED SUBSIDIARY
				\$	\$		\$	\$	\$
1		1911	Electronic Data Processing - SmartGrid	113,194	34,024	100.00	34,024		34,024
2		1970	Communication Equipment - SmartGrid	27,261,331	1,908,843	100.00	1,908,843		1,908,843
3			Total Common Plant - SmartGrid	27,374,525	1,942,867		1,942,867	0	1,942,867
4		(1)	Common Plant Allocated to Gas (SG)						
5		(1)	Original Cost Reserve	13,383,405	949,868	100.00	949,868	0	949,868
6			Total Common Plant	316,932,720	147,526,959		147,526,959	(2,366,440)	145,160,519
7			Total Common plant allocated to Gas	61,180,507	24,971,243		24,971,243	(390,463)	24,580,780
8			Total Gas Plant including Allocated Common	1,829,978,188	450,973,980		450,973,980	(3,939,707)	447,034,273

(1) Allocation of Common Plant / SmartGrid to gas determined by SmartGrid filings

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADJUSTMENTS TO ACCUMULATED DEPRECIATION AND AMORTIZATION  
AS OF MARCH 31, 2012

SCHEDULE B-3.1  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY ADJUSTMENT	ALLOCATION %	JURISDICTIONAL ADJUSTMENT
1			Distribution Plant			
2	388		Gas ARO	3,504,391	100.00	3,504,391 (a)
3			Total Distribution Plant	<u>3,504,391</u>		<u>3,504,391</u>
4			General Plant			
5		2030	Miscellaneous Intangible Plant	22,458	100.00	22,458 (b)
6	397	2970	Communication Equipment	22,395	100.00	22,395 (c)
7			Total General Plant	<u>44,853</u>		<u>44,853</u>
8			Common Plant	\$		\$
9		1900	Structures & Improvements	351,037	100.00	351,037 (d)
10		1900	Structures & Improvements-Hartwell Golf Course	60,252	100.00	60,252 (e)
11		1900	Structures & Improvements-Envision Center	681,977	100.00	681,977 (f)
12		1900	Structures & Improvements-Fourth & Walnut (Clopay)	154,281	100.00	154,281 (h)
13		1900	Structures & Improvements-Holiday Park	2,509	100.00	2,509 (i)
14		1900	Structures & Improvements-Atrium II	961,419	100.00	961,419 (j)
15		1910	Office Furniture & Equipment	(2,038)	100.00	(2,038) (d)
16		1940	Tools, Shop & Garage Equipment	33,208	100.00	33,208 (d)
17		1970	Communication Equipment	1,232	100.00	1,232 (d)
18		1980	Miscellaneous Equipment	5,290	100.00	5,290 (d)
19		1990, 1991	Retirement Work in Progress-ARO	<u>117,273</u>	100.00	<u>117,273 (g)</u>
20			Total	<u>2,366,440</u>		<u>2,366,440</u>
21		16.50%	Common Allocated to Gas	<u>390,463</u>		<u>390,463</u>
22			Total Gas Plant	<u><u>3,939,707</u></u>		<u><u>3,939,707</u></u>

- (a) To eliminate from rate base the Asset Retirement Obligation (See Staff Data Request No. 50 Supplemental)
- (b) To eliminate from rate base Company Allocation Errors 1 and 2 (See Staff's Workpapers WPB-3.1a and WPB-3.1b)
- (c) To eliminate from rate base the Adjustment for Stores Loading and Adjustment for Uninstalled Gas Modules ( See Staff's Workpapers WPB-3.1c and WPB-31d)
- (d) To eliminate from rate base the Hartwell Recreation Facilities allocated to uses other than for specific company purposes. (See Applicant's Schedule B-2.5)
- (e) To eliminate from rate base the Hartwell Golf Course ( See Staff's Data Request No. 133)
- (f) To eliminate from rate base the Envision Center (See Applicant's Schedule B-3.4)
- (g) To eliminate from rate base the Common Plant Retirement Work in Progress-ARO ( See Staff Data Request No. 78 in Case No. 12-1682-EL-AIR)
- (h) To eliminate from rate base the Clopay Bldg & Access Ramp (See Staff's Workpaper WPB- 3.1e)
- (i) To eliminate from rate base the Leasehold Improvements that are fully amortized (See Applicant's Schedule B-3.4 & Staff's Schedule B-2.2)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1686-GA-AIR  
DEPRECIATION ACCRUAL RATES AND  
JURISDICTIONAL ACCUMULATED BALANCES BY ACCOUNTS, FUNCTIONAL CLASS OR MAJOR PROPERTY GROUP  
AS OF MARCH 31, 2012  
MANUFACTURED GAS PRODUCTION PLANT

SCHEDULE B-3.2  
PAGE 1 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Staff Schedule B-3

LINE NO. (A)	F.E.R.C. ACCT. NO. (B-1)	COMPANY ACCT. NO. (B-2)	ACCOUNT TITLE OR MAJOR PROPERTY GROUPING (C)	ADJUSTED PLANT INVESTMENT (D)	ACCUMULATED BALANCE (E)	PROPOSED ACCRUAL RATE (F)	CALCULATED DEPR. EXPENSE (G=DxF)	% NET SALVAGE (H)	AVERAGE SERVICE LIFE (I)	CURVE FORM (J)
				\$	\$	%	\$			
1	304	2040	Land and Land Rights	424,842	(2,080)					
2	304	2041	Rights of Way	4,147	4,116	2.00	83		50	SQ
3	305	2050	Structures & Improvements	3,793,937	3,232,676	2.00	75,879	(10)	55	R2
4	311	2110	Liquefied Petroleum Gas Equipment	7,155,568	5,116,220	2.33	166,725	(5)	45	R1.5
5	320	2200	Other Equipment	30,095	34,582	7.14	0	0	14	L1
6		108	Retirement Work in Progress		(1)		(a)			
7			Total Manufactured Gas Production Plant	11,408,369	8,385,513		242,667			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
DEPRECIATION ACCRUAL RATES AND  
JURISDICTIONAL ACCUMULATED BALANCES BY ACCOUNTS, FUNCTIONAL CLASS OR MAJOR PROPERTY GROUP  
AS OF MARCH 31, 2012  
DISTRIBUTION PLANT

SCHEDULE B-3.2  
PAGE 2 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Staff Schedule B-3

LINE NO.	F.E.R.C. COMPANY ACCT. NO.	ACCOUNT TITLE OR MAJOR PROPERTY GROUPING	ADJUSTED PLANT INVESTMENT	ACCUMULATED BALANCE	PROPOSED ACCRUAL RATE	CALCULATED DEPR. EXPENSE	% NET SALVAGE	AVERAGE SERVICE LIFE	CURVE FORM
(A)	(B-1)	(B-2)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
			\$	\$	%	\$			
1	374	Land and Land Rights	133,008	3,536	0.00	0	Perpetual Life	65	R3
2	374	Rights of Way	8,980,609	1,076,651	1.54	138,301	Perpetual Life	55	R1.5
3	374	City Gate Check Station	3,663	0	0.00	0	(15)	46	R2.5
4	375	Structures & Improvements	1,534,497	612,865	2.09	32,071	(25)	67	R2.5
5	376	Mains - Cast Iron & Copper	8,243,290	8,025,798	2.72	224,217	(25)	60	R3
6	376	Mains - Steel	374,815,983	158,968,786	1.87	7,009,059	(25)	49	R1
7	376	Mains - Plastic	567,049,597	90,312,806	2.08	11,784,632	(15)	15	L2
8	378	System Meas. & Reg. Station Equipment	17,649,106	4,803,790	2.35	414,754	(5)	48	R1.5
9	378	System Meas. & Reg. Station Equipment-Elec	3,815,788	3,022,752	7.00	267,105	(15)	15	L0
10	378	District Regulating Equipment	4,571,843	2,077,514	6.67	109,724	(15)	37	R1.5
11	378	Meas. & Reg. - City Gate	263,232	263,232	3.11	231,841	(15)	40	S0
12	380	Meas. & Reg. - Cast Iron & Copper	7,454,696	9,138,628	2.88	525,475	(15)	32	R2
13	380	Services-Steel	18,245,672	8,537,868	3.59	13,255,523	(15)	45	R2
14	380	Services-Plastic	369,234,614	86,323,713	2.22	1,036,844	0	20	R2
15	381	Meters	46,704,706	10,617,689	5.00	0	0	50	R2.5
16	381	Utility of the Future Meters	0	0	2.00	565,547	0	50	R2.5
17	382	Meter Installations	28,277,340	9,884,673	2.00	453,414	0	50	R2
18	383	House Regulators	22,670,684	3,894,571	2.00	345,921	0	50	R1
19	384	House Regulator Installations	17,296,036	3,759,582	2.63	73,705	(5)	25	S2.5
20	385	Large Industrial Meas. & Reg. Equipment - Comm	2,802,485	1,481,083	4.20	30,618	(5)	15	S1
21	385	Large Industrial Meas. & Reg. Equipment - Other	728,946	420,035	6.67	14,066	(20)	45	R2
22	387	Other Equipment - Other	210,891	125,955	2.67	19,698	0		
23	387	Street Lighting Equipment	737,757	518,504		0			
24	108	Retirement Work in Progress	0	(5,630,083)		0			
25		Gas ARO	0	0					
26		Total Distribution Plant	1,501,424,444	398,040,048		36,560,071			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
DEPRECIATION ACCRUAL RATES AND  
JURISDICTIONAL ACCUMULATED BALANCES BY ACCOUNTS, FUNCTIONAL CLASS OR MAJOR PROPERTY GROUP  
AS OF MARCH 31, 2012  
GENERAL PLANT

SCHEDULE B-3.2  
PAGE 3 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Staff Schedule B-3

LINE NO. (A)	F.I.R.C. AGGT. NO. (B-1)	COMPANY AGGT. NO. (B-2)	ACCOUNT TITLE OR MAJOR PROPERTY GROUPING (C)	INVESTMENT (D)	ADJUSTED JURISDICTION ACCUMULATED BALANCE (E)	PROPOSED ACCRUAL RATE (F)	CALCULATED DEPR. EXPENSE (G-DxF)	% NET SALVAGE (H)	AVERAGE SERVICE LIFE (I)	CURVE FORM (J)
				\$	\$	%	\$			
1	000	2030	Miscellaneous Intangible Plant	14,126,867	8,954,656	Various	1,886,775	(b)	Perpetual Life	5
2	389	2890	Land	0	0		0			
3	390	2900	Structures & Improvements	2,065,248	670,246	3.33	68,773	0	0	30 S01
4	391	2910	Office Furniture & Equipment	596,371	256,143	5.00	29,819	0	0	20 SQ
5	391	2911	Electronic Data Processing Equipment	1,311,766	211,602	20.00	262,353	0	0	5 SQ
6	392	2920	Transportation Equipment	24,590	24,590	9.00	0	(c)	10	10 S2
7	392	2921	Trailers	644,188	445,198	5.00	0	(c)	15	17 S1
8	394	2940	Tools, Shop & Garage Equipment	8,167,347	3,906,925	4.00	326,694	0	0	25 SQ
9	395	2950	Laboratory Equipment	234,056	165,130	6.67	15,612	0	0	15 SQ
10	396	2960	Power Operated Power Equipment	219,039	107,839	6.36	0	(c)	30	11 S1.5
11	397	2970	Communication Equipment	22,329,009	1,073,017	8.87	1,489,345	0	0	15 SQ
12		108	Retirement Work in Progress		212,586		0			
13			Total General Plant	49,718,481	16,027,932		4,079,371			
14			Total Gas Plant	1,562,551,314	422,453,493		40,882,129			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
DEPRECIATION ACCRUAL RATES AND  
JURISDICTIONAL ACCUMULATED BALANCES BY ACCOUNTS, FUNCTIONAL CLASS OR MAJOR PROPERTY GROUP  
AS OF MARCH 31, 2012  
COMMON PLANT - EXCLUDING SMARTGRID

SCHEDULE B-3.2  
PAGE 4 OF 5

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Staff Schedule B-3

LINE NO.	P.E.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE OR MAJOR PROPERTY GROUPING	ADJUSTED-JURISDICTION PLANT INVESTMENT	ACCUMULATED BALANCE	PROPOSED ACCRUAL RATE	CALCULATED DEPR. EXPENSE	% NET SALVAGE	AVERAGE SERVICE LIFE	CURVE FORM
(A)	(B-1)	(B-2)	(C)	(D)	(E)	(F)	(G-DxT)	(H)	(I)	(J)
1	1030		Miscellaneous Intangible Plant	121,520,890	107,949,729	Various	6,981,107	Amortization		
2	1890		Land and Land Rights	2,121,847	106,907		0	Perpetual Life		
3	1891		Rights of Way	37,969	0		0	Composite		
4	1900		Structures & Improvements	118,040,058	18,322,820	3.47	4,085,990	Fully Amortized		
5	1900		Structures & Improvements - Atrium II	961,419	961,419		0	Amortization		
6	1900		Structures & Improvements - Envision Center	368,797	85,035	12.91	0	Amortization		
7	1900		Structures & Improvements - Clopay Bldg - 3rd Floor	820,726	700,921	15.19	55,716	Amortization		
8	1900		Structures & Improvements - Clopay Bldg - 4th / 5th / 6th Floor	4,221,044	4,108,518	2.89	22,078	Amortization		
9	1900		Structures & Improvements - Clopay Bldg - Bld & Access Ramp	303,876	277,019	0.49	20,883	Amortization		
10	1900		Structures & Improvements - Holiday Park	4,214,355	(1,744,180)	16.23	49,319	Amortization		
11	1910		Office Furniture & Equipment	693,843	274,745	5.00	210,718	Amortization		20 SQ
12	1910		Electronic Data Processing - Non SmartGrid	85,311	85,311	20.00	138,769	0		5 SQ
13	1920		Transportation Equipment	474,273	234,543	8.33	0	0		12 L3
14	1921		Trailers	189,750	(151,381)	4.29	0	10		21 S1.5
15	1930		Stores Equipment	1,777,089	522,583	5.00	9,488	0		20 SQ
16	1940		Tools, Shop & Garage Equipment	23,250	1,293	4.00	71,084	0		25 SQ
17	1950		Laboratory Equipment	153,899	62,759	6.67	1,551	0		15 SQ
18	1960		Power Operated Equipment	27,923,131	12,182,455	5.56	0	0		18 SQ.5
19	1970		Communication Equipment - Non SmartGrid	421,522	126,525	6.67	1,862,473	0		15 SQ
20	1980		Miscellaneous Equipment	0	0	5.00	21,076	0		20 SQ
21	1990, 1991		Retirement Work in Progress - ARO		(869,369)					
22	108		Retirement Work In Progress							
23			Total Common Plant (excluding SmartGrid)	284,350,849	143,217,652		13,550,052			
24	16.50%		Common Plant Allocated to Gas (Excluding SmartGrid)							
25	16.50%		Original Cost	46,917,890	23,630,912					
26	16.50%		Reserve							
			Annual Provision				2,235,759			

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1886-GA-AIR  
DEPRECIATION ACCRUAL RATES AND  
AS OF MARCH 31, 2012  
COMMON PLANT - SMARTGRID

SCHEDULE B-3.2  
PAGE 6 OF 6

WORK PAPER REFERENCE NO(S): Staff Schedule B-2.1, Staff Schedule B-3

LINE NO. (A)	F.E.C. ACCT. NO. (B-1)	COMPANY ACCT. NO. (B-2)	ACCOUNT TITLE OR MAJOR PROPERTY GROUPING (C)	ADJUSTED PLANT INVESTMENT (D)	ACCUMULATED BALANCE (E)	ACCURUAL RATE (F)	CALCULATED DEPR. EXPENSE (G-D.F)	% NET SALVAGE (H)	AVERAGE SERVICE LIFE (I)	CURVE FORM (J)
				\$	\$	%	\$			
1		1911	Electronic Data Processing - SmartGrid	113,194	34,024	20.00	22,639	0	5	SQ
2		1970	Communication Equipment - SmartGrid	27,261,331	1,908,843	6.67	1,818,331	0	15	SQ
3			Total Common Plant ( SmartGrid)	27,374,525	1,942,867		1,840,970			
4		(e)	Common Plant Allocated to Gas - SmartGrid							
5		(e)	Original Cost	13,383,405	949,868					
6		(e)	Reserve				890,661			
		(e)	Annual Provision							
7			Total Common Plant	311,725,374	145,160,519		15,391,022			
8			Common Plant Allocated to Gas							
9			Original Cost	60,301,295	24,580,780					
10			Reserve				3,126,420			
			Annual Provision							
11			Total Gas Plant Including Allocated Common	1,622,852,609	447,034,273		44,008,549			

(a) Fully Amortized

(b) See Staff Workpaper WPB-3.2b

(c) Depreciation Charged to Transportation Expenses

(d) These Leasehold improvements are being amortized over the life of the Lease (Applicant's Schedule B-3.4 and Staff's Data Request No. 122)

(e) Common Plant / SmartGrid Allocated to Gas Determined by SmartGrid Filings



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
CONSTRUCTION WORK IN PROGRESS  
AS OF MARCH 31, 2012

SCHEDULE B-4  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):

Line No. (A)	Project No. (B)	Description of Project (C)	Accumulated Costs		Allocation % (G)	Total Jurisdictional Cost at Date Certain (F)	Estimated Physical Percent Completion (I)
			Construction Dollars (D)	AFUDC Capitalized (E)			
			Total Cost (F=D+E)				

Pollution Control Projects:

- 1 The Company has not included any Construction Work in Progress in this Rate Case.

Other Projects:

- 2 The Company has not included any Construction Work in Progress in this Rate Case.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ALLOWANCE FOR WORKING CAPITAL  
AS OF MARCH 31, 2012

SCHEDULE B-5  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	WORKING CAPITAL COMPONENT	DESCRIPTION OF METHODOLOGY USED TO DETERMINE JURISDICTIONAL REQUIREMENT	WORK PAPER REFERENCE NUMBER	JURISDICTION (A)
1	Cash Working Capital	None Requested		<u>0</u>
2				
3				
4				
5	Material and Supplies:			
6				
7	Gas Enricher Liquids	13 month average balance	SCH B-5.1, WPB-5.1b	0
8				
9	Other	13 month average balance less allowance for new construction based on withdrawals	SCH B-5.1, WPB-5.1c	0
10				
11				
12				
13				
14				
15	Gas Stored - Current (B)	13 month average balance		0
16				
17	Prepayments for Gas - Undelivered	13 month average balance		<u>0</u>
18				
19	Total Material and Supplies			<u>0</u>
20				
21				
22				
23	PIPP Uncollectibles - Balance	13 month average balance		<u>0</u>

(A) Total Utility is 100% Jurisdictional.

(B) Excluded per Order approved in Case No. 07-589-GA-AIR.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
OTHER RATE BASE ITEMS SUMMARY  
AS OF MARCH 31, 2012

WORK PAPER REFERENCE NO(S): WPB-6.1c through WPB-6.1e			SCHEDULE B-6 PAGE 1 OF 2		
LINE NO.	ACCOUNT NUMBER	DESCRIPTION	TOTAL COMPANY (A)	ADJUSTMENTS	ADJUSTED JURISDICTION
1	252	Customers' Advances for Construction	(3,597,473)	0	(3,597,473)
2					
3	235	Customer Service Deposits	(8,453,180)	0	(8,453,180)
4					
5	271	Contributions in Aid of Construction	0	0	0
6					
7		Post Retirement Benefits	0	(14,645,755)	(14,645,755)
8					
9	255	Investment Tax Credits: (B)			
10					
11		Pre-1971 3% Credit	0	0	0
12		1971 4% Credit	(6,554)	0	(6,554)
13		1975 6% Credit	0	0	0
14		1981 10% Credit	(2,845,131)	2,845,131	0
15		Total Investment Tax Credits	(2,851,685)	2,845,131	(6,554)
16					
17		Deferred Income Taxes:			
18					
19	190	401(k) Incentive Plan	2,918	0	2,918
20	190	ARO Cumulative Effect	5,443,894	0	5,443,894
21	190	Environmental Reserve	8,903,184	0	8,903,184
22	190	FAS 106 OPEB	3,590,411	0	3,590,411
23	190	FAS 87 Non-Qualified Pension	351,343	0	351,343
24	190	FAS 87 Qualified Pension	(4,146,062)	0	(4,146,062)
25	190	Federal Deferred Tax Receivable	12,418,562	0	12,418,562
26	190	Gas Meters	(3,456,610)	0	(3,456,610)
27	190	Gas Supplier Refund	435,728	0	435,728
28	190	Incentive Plan	241,214	0	241,214
29	190	Misc	37,456	0	37,456
30	190	Natural Gas in Transit	96,538	0	96,538
31	190	Offsite Gas Storage	762,972	0	762,972
32	190	Post Retirement Benefits - SFAS 112	530,912	0	530,912
33	190	Property Tax	8,254,533	(8,254,533)	0
34	190	Property Tax on Propane	536,061	0	536,061
35	190	ITC FAS 109	(467,584)	467,584	0
36	190	Unamortized Debt Premium	(1,647,565)	0	(1,647,565)
37	190	Unbilled Revenue - Fuel	1,060,050	(1,060,050)	0
38	190	Uncollectible Accounts	76,777	0	76,777
39	190	Uncollectible Accounts PIP	(1,104,646)	0	(1,104,646)
40	190	Vacation Pay Accruals	1,138,153	0	1,138,153
41		Total Account 190	33,058,239	(8,846,999)	24,211,240

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1885-GA-AIR  
OTHER RATE BASE ITEMS SUMMARY  
AS OF MARCH 31, 2012

SCHEDULE B-6  
PAGE 2 OF 2

WORK PAPER REFERENCE NO(S): WPB-6.1c through WPB-6.1e

LINE NO.	ACCOUNT NUMBER	DESCRIPTION	TOTAL COMPANY (A)	ADJUSTMENTS	ADJUSTED JURISDICTION
1	282	Deferred Income Taxes (Cont)			
2	282	AFUDC Debt	(1,172,089)		(1,172,089)
3	282	CIAC	715,729		715,729
4	282	Cwip Differences	(461,822)		(461,822)
5	282	FAS109	(15,444,583)	15,444,583	0
6	282	Leased Meters	(19,600,264)		(19,600,264)
7	282	Miscellaneous	(8,683,344)		(8,683,344)
8	282	Non-Cash Overheads	4,970,861		4,970,861
9	282	Tax Depreciation	(234,290,149)		(234,290,149)
10	282	Tax Interest Capitalized	2,730,405		2,730,405
11		Total Account 282	(271,235,455)	15,444,583	(255,790,873)
12	283	ARO Cumulative Effect	(5,007,186)	0	(5,007,186)
13	283	Deferred Fuel	6,585,303	(6,585,303)	0
14	283	Deferred Smart Grid Costs	584,718	0	584,718
15	283	Environmental Reserve	(24,745,199)	(849,819)	(25,595,018)
16	283	FAS 106 OPEB	(1,660,920)	0	(1,660,920)
17	283	FAS 87 Non-Qualified Pension	(19,464)	0	(19,464)
18	283	FAS 87 Qualified Pension	(8,699,583)	0	(8,699,583)
19	283	Loss on Reacquired Debt	(694,232)	0	(694,232)
20	283	Merger Costs	102,753	(102,753)	0
21	283	Post In-Service Carrying Costs	(5,982,648)	0	(5,982,648)
22	283	Rate Case	(50,834)	0	(50,834)
23	283	Smart Grid	(5,264,619)	0	(5,264,619)
24	283	Uncollectible Accounts	1,705,185	0	1,705,185
25	283	Vacation Pay Accruals	(686,080)	0	(686,080)
26		Total Account 283	(43,832,866)	(7,537,875)	(51,370,741)
27					
28		Total Deferred Income Taxes	(282,010,022)	(940,291)	(282,950,314)
29		Other:			
30		AMRP and Smart Grid Post-in-Service Carrying Costs	0	15,796,710	15,796,710
31		Total Other	0	15,796,710	15,796,710
32					

(A) Total Company is 100% Jurisdictional.

(B) The company elected the immediate flow through option under Section 46(e)(3) in regards to the 1971 election and the ratable flow through option provided under Section 46(f)(2) in regards to the 1975 election.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
JURISDICTIONAL ALLOCATION FACTORS  
RATE BASE AND OPERATING INCOME

SCHEDULE B-7  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

LINE NO.	ACCOUNT NUMBER	ACCOUNT TITLE	ALLOCATION FACTOR	DESCRIPTION OF FACTORS AND/OR METHOD OF ALLOCATION
-------------	-------------------	------------------	----------------------	--

Not Applicable - 100% Jurisdictional

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
JURISDICTIONAL PRO FORMA INCOME STATEMENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-1  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): Staff's Schedule C-2 & WPC-1a

LINE NO.	DESCRIPTION	ADJUSTED REVENUE & EXPENSES (A)	PROPOSED INCREASE (B)	PROFORMA REVENUE & EXPENSES (C)
1	Operating Revenues	\$ 382,716,847	\$ 44,607,929	\$ 427,324,776
2				
3	Operating Expenses			
4	Operation & Maintenance	216,682,567	241,998	216,924,565
5	Depreciation	44,008,549	0	44,008,549
6	Taxes - Other	24,751,895	0	24,751,895
7	Operating Expenses before Income Taxes	285,443,011	241,998	285,685,009
8				
9	Federal Income Taxes	26,926,831	15,528,076	42,454,907
10				
11	Total Operating Expenses	312,369,842	15,770,074	328,139,916
12				
13	Net Operating Income	\$ 70,347,005	\$ 28,837,855	\$ 99,184,860
14				
15	Rate Base	\$ 881,961,770		\$ 881,961,770
16				
17	Rate of Return	7.98%		11.25%

(A) Staff's Schedule C-2  
(B) Applicant's WPC-1a  
(C) Column (A) + Column (B)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADJUSTED TEST YEAR OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

WORK PAPER REFERENCE NO(S): Staff's Schedule C-2.1 &  
Staff's Schedule C-3

SCHEDULE C-2  
PAGE 1 OF 1

LINE NO.	DESCRIPTION	UNADJUSTED REVENUE & EXPENSES	STAFF'S ADJUSTMENTS	ADJUSTED REVENUE & EXPENSES
1	OPERATING REVENUES			
2	Base Revenue and Riders	\$ 267,343,927	\$ (24,829,455)	\$ 242,514,472
3	Gas Costs Revenue	151,105,778	(15,638,131)	135,467,647
4	Other Operating Revenue	2,733,651	2,001,077	4,734,728
5	Total Operating Revenues	<u>421,183,356</u>	<u>(38,466,509)</u>	<u>382,716,847</u>
6				
7	OPERATING EXPENSES			
8	Operation and Maintenance Expenses			
9	Production Expenses			
10	Liquefied Petroleum Gas	61,954	0	61,954
11	Other	1,214,314	0	1,214,314
12	Total Production Expense	<u>1,276,268</u>	<u>0</u>	<u>1,276,268</u>
13				
14	Other Gas Supply Expenses			
15	Purchased Gas	143,959,346	(8,553,653)	135,405,693
16	Other	1,814,319	0	1,814,319
17	Total Other Gas Supply Expense	<u>145,773,665</u>	<u>(8,553,653)</u>	<u>137,220,012</u>
18				
19	Transmission Expense	0	0	0
20	Distribution Expense	23,114,442	(150,050)	22,964,392
21	Customer Accounts Expense	30,317,499	(14,069,954)	16,247,545
22	Customer Service & Information Expense	8,053,632	0	8,053,632
23	Sales Expense	178,483	(178,452)	31
24	Administrative & General Expense	37,074,246	(10,352,039)	26,722,207
25	Amortization of Deferred Expense	3,136,489	1,061,991	4,198,480
26	Total Operation and Maintenance Expense	<u>248,924,724</u>	<u>(32,242,157)</u>	<u>216,682,567</u>
27				
28	Depreciation Expense	<u>41,322,736</u>	<u>2,685,813</u>	<u>44,008,549</u>
29				
30	Taxes Other Than Income Taxes			
31	Other Federal Taxes	2,484,354	(656,002)	1,828,352
32	State and Other Taxes	50,670,721	(27,747,178)	22,923,543
33	Total Taxes Other Than Income Taxes	<u>53,155,075</u>	<u>(28,403,180)</u>	<u>24,751,895</u>
34				
35	Federal Income Taxes			
36	Normal and Surcharge	(12,554,963)	6,762,415	(5,792,548)
37	Provision for Deferred Income Taxes	33,479,991	(760,612)	32,719,379
38	Total Federal Income Tax Expense	<u>20,925,028</u>	<u>6,001,803</u>	<u>26,926,831</u>
39				
40	Total Operating Expenses and Taxes	<u>364,327,563</u>	<u>(51,957,721)</u>	<u>312,369,842</u>
41				
42	Net Operating Income	<u>\$ 56,855,793</u>	<u>\$ 13,491,212</u>	<u>\$ 70,347,005</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SUMMARY OF JURISDICTIONAL ADJUSTMENTS  
TO OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3  
PAGE 1 OF 5

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO	TITLE OF ACCOUNT	TOTAL SCHEDULE C-3	ANNUALIZE / NORMALIZE REV & EXP C-3.1	INTENTIONALLY LEFT BLANK C-3.2	RATE CASE EXPENSE C-3.3	ANNUALIZED TEST YEAR WAGES C-3.4	ANNUALIZE DEPRECIATION C-3.5
1	ELEMENT OF OPERATING INCOME						
2	OPERATING REVENUE						
3	Base	(24,829,455)	8,168,330				
4	Gas Costs	(15,638,131)	(15,638,131)				
5	Other	2,001,077	2,001,077				
6	Total Revenue	(38,466,509)	(5,468,724)	0	0	0	0
7	OPERATING EXPENSES						
8	Operation and Maintenance Expenses						
9	Production Expenses	0					
10	Liquidified Petroleum Gas	0					
11	Other	0					
12	Total Production Expense	0	0	0	0	0	0
13	Other Gas Supply Expenses						
14	Purchased Gas	(8,553,653)	(8,553,653)				
15	Other	0					
16	Total Other Gas Supply Expense	(8,553,653)	(8,553,653)	0	0	0	0
17	Transmission Expense	0					
18	Distribution Expense	(150,050)					
19	Customer Accounts Expense	(14,069,954)					
20	Customer Serv & Info Expense	0					
21	Sales Expense	(178,452)			(15,998)	(4,372,715)	
22	Administrative & General Expense	(10,352,039)		0			
23	Amortization of Deferred Expense	1,061,991		0	(15,998)	(4,372,715)	0
24	Total Operation and Maintenance Expenses	(32,242,157)	(8,553,653)	0	(15,998)	(4,372,715)	0
25	Depreciation Expense	2,685,813	0	0	0	0	2,685,813
26	Taxes Other Than Income Taxes						
27	Other Federal Taxes	(656,002)					
28	State and Other Taxes	(27,747,178)					
29	Total Taxes Other Than Income Tax	(28,403,180)	0	0	0	0	0
30	Federal Income Taxes						
31	Normal and Surtax	6,762,415	1,079,724	0	5,599	1,530,450	0
32	Prov Deferred Inc Tax (Deferrals)	(760,612)					(940,035)
33	Prov Deferred Inc Tax (Writebacks)	0					
34	Total Federal Inc Tax Expense	6,001,803	1,079,724	0	5,599	1,530,450	(940,035)
35	Total Oper. Expenses and Tax	(51,957,721)	(7,473,929)	0	(10,399)	(2,842,265)	1,745,778
36	Net Operating Income	13,491,212	2,005,205	0	10,399	2,842,265	(1,745,778)



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SUMMARY OF JURISDICTIONAL ADJUSTMENTS  
TO OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

WORK PAPER REFERENCE NO(S): SEE BELOW		SCHEDULE C-3 PAGE 2 OF 5						
LINE NO.	TITLE OF ACCOUNT	CUSTOMER SERVICE DEPOSITS C-3.6	OHIO EXCISE TAX C-3.7	ANNUALIZE PROPERTY TAX C-3.8	ELIMINATE PIPP REVENUE AND EXPENSE C-3.9	INTEREST EXPENSE DEDUCTIBLE C-3.10	ELIMINATE SMART GRID OAM AMORTIZATION C-3.11	
1	OPERATING REVENUE							
2	Base		(16,428,536)		(10,674,058)			
3	Gas Costs							
4	Other							
5	Total Revenue	0	(16,428,536)	0	(10,674,058)	0	0	
6								
7	OPERATING EXPENSES							
8	Operation and Maintenance Expenses							
9	Production Expenses							
10	Liquidified Petroleum Gas							
11	Other							
12	Total Production Expense	0	0	0	0	0	0	
13								
14	Other Gas Supply Expenses							
15	Purchased Gas							
16	Other							
17	Total Other Gas Supply Expense	0	0	0	0	0	0	
18								
19	Transmission Expense							
20	Distribution Expense							
21	Customer Accounts Expense	253,595			(10,612,499)			
22	Customer Serv & Info Expense							
23	Sales Expense							
24	Administrative & General Expense							
25	Amortization of Deferred Expense							
26	Total Operation and Maintenance Expenses	253,595	0	0	(10,612,499)	0	(2,827,689)	
27							(2,827,689)	
28	Depreciation Expense	0	0	0	0	0	0	
29								
30	Taxes Other Than Income Taxes							
31	Other Federal Taxes							
32	State and Other Taxes		(19,992,607)	(337,452)				
33	Total Taxes Other Than Income Tax	0	(19,992,607)	(337,452)	0	0	0	
34								
35	Federal Income Taxes							
36	Normal and Surtax	(88,758)	1,247,425	118,108	(21,546)	(1,106,843)	989,691	
37	Prov Deferred Inc Tax (Deferrals)					286,091		
38	Prov Deferred Inc Tax (Writebacks)							
39	Total Federal Inc Tax Expense	(88,758)	1,247,425	118,108	(21,546)	(820,752)	989,691	
40								
41	Total Oper. Expenses and Tax	164,837	(18,745,182)	(219,344)	(10,634,045)	(820,752)	(1,837,998)	
42								
43	Net Operating Income	(164,837)	2,316,646	219,344	(40,013)	820,752	1,837,998	

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SUMMARY OF JURISDICTIONAL ADJUSTMENTS  
TO OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3  
PAGE 3 OF 5

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	TITLE OF ACCOUNT	STATE TAX RIDER C-3.12	BUDGET EXPENSES C-3.13	ELIMINATE NON-JURIS EXPENSES C-3.14	ADJUST PUC/OC ASSESSMENTS C-3.15	UNCOLLECTIBLE REVENUE & EXPENSE C-3.16	ANNUALIZE PENSION & BENEFIT EXP C-3.17
1	ELEMENT OF OPERATING INCOME						
2	OPERATING REVENUE						
3	Base	(7,631,139)				1,735,948	
4	Gas Costs						
5	Other		0	0	0	1,735,948	0
6	Total Revenue	(7,631,139)					
7	OPERATING EXPENSES						
8	Operation and Maintenance Expenses						
9	Production Expenses						
10	Liquidified Petroleum Gas						
11	Other		0	0	0	0	0
12	Total Production Expense	0					
13							
14	Other Gas Supply Expenses						
15	Purchased Gas						
16	Other		0	0	0	0	0
17	Total Other Gas Supply Expense	0					
18							
19	Transmission Expense						
20	Distribution Expense		(936,676)	(50)		497,562	
21	Customer Accounts Expense						
22	Customer Serv & Info Expense						
23	Sales Expense		(3,155,638)	(178,452)	(282,701)	1,918,247	(2,494,313)
24	Administrative & General Expense			(173,782)		2,415,809	(2,494,313)
25	Amortization of Deferred Expense		(4,092,313)	(352,284)	(282,701)		
26	Total Operation and Maintenance Expenses	0					
27							
28	Depreciation Expense	0	0	0	0	0	0
29							
30	Taxes Other Than Income Taxes						
31	Other Federal Taxes	(7,417,119)					
32	State and Other Taxes	(7,417,119)	0	0	0	0	0
33	Total Taxes Other Than Income Tax						
34							
35	Federal Income Taxes						
36	Normal and Surtax	(74,907)	1,432,310	123,299	98,945	(237,951)	873,010
37	Prov Deferred Inc Tax (Deferrals)						
38	Prov Deferred Inc Tax (Writebacks)						
39	Total Federal Inc Tax Expense	(74,907)	1,432,310	123,299	98,945	(237,951)	873,010
40							
41	Total Oper. Expenses and Tax	(7,492,026)	(2,660,003)	(228,985)	(183,756)	2,177,858	(1,621,303)
42							
43	Net Operating Income	(139,113)	2,660,003	228,985	183,756	(441,910)	1,621,303

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SUMMARY OF JURISDICTIONAL ADJUSTMENTS  
TO OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3  
PAGE 4 OF 5

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	TITLE OF ACCOUNT	ANNUALIZE PAYROLL TAXES C-3.18	INTENTIONALLY LEFT BLANK C-3.19	ANNUALIZE AMORT OF PISCC C-3.20	INTENTIONALLY LEFT BLANK C-3.21	AMORTIZE CAMERA WORK C-3.22	ELIMINATE MERGERS COSTS C-3.23
1	ELEMENT OF OPERATING INCOME						
2	OPERATING REVENUE						
3	Base						
4	Gas Costs						
5	Other						
6	Total Revenue	0	0	0	0	0	0
7	OPERATING EXPENSES						
8	Operation and Maintenance Expenses						
9	Production Expenses						
10	Liquidified Petroleum Gas						
11	Other						
12	Total Production Expense	0	0	0	0	0	0
13							
14	Other Gas Supply Expenses						
15	Purchased Gas						
16	Other						
17	Total Other Gas Supply Expense	0	0	0	0	0	0
18							
19	Transmission Expense						
20	Distribution Expense						
21	Customer Accounts Expense						
22	Customer Serv & Info Expense						
23	Sales Expense						
24	Administrative & General Expense						(168,997)
25	Amortization of Deferred Expense			304,768		1,666,667	
26	Total Operation and Maintenance Expenses	0	0	304,768	0	1,666,667	(168,997)
27							
28	Depreciation Expense	0	0	0	0	0	0
29							
30	Taxes Other Than Income Taxes	(656,002)					
31	Other Federal Taxes						
32	State and Other Taxes						
33	Total Taxes Other Than Income Tax	(656,002)	0	0	0	0	0
34							
35	Federal Income Taxes						
36	Normal and Surtax	229,601	0	0	0	(583,333)	59,149
37	Prov Deferred Inc Tax (Deferrals)			(106,668)			
38	Prov Deferred Inc Tax (Writebacks)						
39	Total Federal Inc Tax Expense	229,601	0	(106,668)	0	(583,333)	59,149
40							
41	Total Oper. Expenses and Tax	(426,401)	0	198,098	0	1,083,334	(109,848)
42							
43	Net Operating Income	426,401	0	(198,098)	0	(1,083,334)	109,848

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SUMMARY OF JURISDICTIONAL ADJUSTMENTS  
TO OPERATING INCOME  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3  
PAGE 5 OF 5

WORK PAPER REFERENCE NO(S): SEE BELOW

LINE NO.	TITLE OF ACCOUNT	ADDITIONAL CAMERA WORK EXP C-3.24	INTENTIONALLY LEFT BLANK C-3.25	SMART GRID ADJUSTMENT SAVING C-3.26	MEDICAL COSTS C-3.27	INTENTIONALLY LEFT BLANK C-3.28	INTENTIONALLY LEFT BLANK C-3.29
1	OPERATING REVENUE						
2	Base						
3	Gas Costs						
4	Other						
5	Total Revenue	0	0	0	0	0	0
6							
7	OPERATING EXPENSES						
8	Operation and Maintenance Expenses						
9	Production Expenses						
10	Liquidified Petroleum Gas						
11	Other						
12	Total Production Expense	0	0	0	0	0	0
13							
14	Other Gas Supply Expenses						
15	Purchased Gas						
16	Other						
17	Total Other Gas Supply Expense	0	0	0	0	0	0
18							
19	Transmission Expense						
20	Distribution Expense	(150,000)		(3,271,937)			
21	Customer Accounts Expense						
22	Customer Serv & Info Expense						
23	Sales Expense				312,105		0
24	Administrative & General Expense						
25	Amortization of Deferred Expense						
26	Total Operation and Maintenance Expenses	(150,000)	0	(3,271,937)	312,105	0	0
27							
28	Depreciation Expense	0	0	0	0	0	0
29							
30	Taxes Other Than Income Taxes						
31	Other Federal Taxes						
32	State and Other Taxes						
33	Total Taxes Other Than Income Tax	0	0	0	0	0	0
34							
35	Federal Income Taxes						
36	Normal and Surtax	52,500	0	1,145,178	(109,237)	0	0
37	Prov Deferred Inc Tax (Deferrals)						
38	Prov Deferred Inc Tax (Writebacks)						
39	Total Federal Inc Tax Expense	52,500	0	1,145,178	(109,237)	0	0
40							
41	Total Oper. Expenses and Tax	(97,500)	0	(2,126,759)	202,868	0	0
42							
43	Net Operating Income	97,500	0	2,126,759	(202,868)	0	0

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZED REVENUE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.1  
PAGE 1 OF 2

WORK PAPER REFERENCE NO(S).: WPC-3.1a, WPC-3.1b

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect adjustments to operating revenues to reclassify and annualize base and gas cost recovery revenue, to eliminate unbilled revenues and to adjust other operating revenues.

Base Revenue	To Sch C-3 Summary <---	\$	8,168,330
Gas Cost Revenue	To Sch C-3 Summary <---		(15,638,131)
Other Revenue	To Sch C-3 Summary <---		<u>2,001,077</u>
Total		\$	(5,468,724)
Jurisdictional allocation percentage			<u>100%</u>
Jurisdictional amount			<u>\$ (5,468,724)</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZED GAS COST  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.1  
PAGE 2 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.1a, WPC-3.1b

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the change in purchased gas cost which would result from the annualization of purchased gas cost and the elimination of gas costs associated with unbilled revenues.

Gas Cost Expense Adjustment \$ (8,553,653)

Jurisdictional allocation percentage 100%

Jurisdictional amount To Sch C-3 Summary <--- \$ (8,553,653)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.2  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION:

Total	0
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ ---
	To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
RATE CASE EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.3  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): SCHEDULE C-8, WPC-3.3a

PURPOSE and DESCRIPTION	AMOUNT
PURPOSE and DESCRIPTION: To adjust test year expenses to reflect the estimated cost of presenting this case as reflected on Schedule C-8.	Total \$ (15,998)
Jurisdictional allocation percentage	100%
Jurisdictional amount	To Sch C-3 Summary <--- \$ (15,998)



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZED WAGE ADJUSTMENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.4  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.4a through WPC-3.4d

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To annualize test year payroll costs  
using 12 months actual August 2012

Total	\$ (4,372,715)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (4,372,715)

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZED DEPRECIATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.5  
PAGE 1 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.5a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the adjustment to annualize depreciation expense as calculated on Schedule B-3.2 based on plant at March 31, 2012.

Total	\$ 2,685,813
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <— \$ <u>2,685,813</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZED DEPRECIATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.5  
PAGE 2 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.5a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the adjustment to deferred income taxes as a result of the annualization of book depreciation based on plant at March 31, 2012.

Total	\$ (940,035)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (940,035)

To Sch C-3 Summary <--

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTEREST ON CUSTOMER SERVICE DEPOSITS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.6  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPB-6.1a

PURPOSE and DESCRIPTION	SCHEDULE/ WORK PAPER REFERENCE	AMOUNT
-------------------------	--------------------------------------	--------

PURPOSE and DESCRIPTION: To reflect the interest on  
Customer Service Deposits as an operating expense.

Total	WPB-6.1a	\$ 253,595
Jurisdictional allocation percentage		<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <---	<u>\$ 253,595</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
OHIO EXCISE TAX  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.7  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.7a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate Ohio Excise Tax revenue and expense.

Ohio Excise Tax Revenue	\$ (16,428,536)
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	<u>\$ (16,428,536)</u>
Ohio Excise Tax Expense	\$ (19,992,607)
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	<u>\$ (19,992,607)</u>

To Sch C-3 Summary <---

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
PROPERTY TAX ADJUSTMENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.8  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):: WPC-3.8a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the change in expense if property taxes were calculated based on plant in service as of March 31, 2012.

Total \$ (337,452)

Jurisdictional allocation percentage 100%

Jurisdictional amount To Sch C-3 Summary <—  
\$ (337,452)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ELIMINATE PIPP REVENUE AND EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.9  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.9a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate PIPP revenue and expense.

PIPP Uncollectible Revenue	\$ (10,674,058)
Jurisdictional allocation percentage	100%
Jurisdictional amount	<u>\$ (10,674,058)</u>
To Sch C-3 Summary <---	
PIPP Uncollectible expense	\$ (10,612,499)
Jurisdictional allocation percentage	100%
Jurisdictional amount	<u>\$ (10,612,499)</u>
To Sch C-3 Summary <---	

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTEREST EXPENSE DEDUCTIBLE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.10  
PAGE 1 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.10a, SCHEDULE B-1, SCHEDULE D-1

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect federal income taxes at 35% due to interest deductible for tax purposes being based on rate base at March 31, 2012 as shown on Schedule B-1 and the weighted cost of debt of 2.48% as shown on Schedule D-1.

Total	\$ (1,106,843)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (1,106,843)

To Sch C-3 Summary <---



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTEREST EXPENSE DEDUCTIBLE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.10  
PAGE 2 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.10a, SCHEDULE B-1, SCHEDULE D-1

PURPOSE and DESCRIPTION	TOTAL AMOUNT
-------------------------	-----------------

PURPOSE and DESCRIPTION: To reflect the elimination of federal deferred tax expenses related to Allowance for Funds Used During Construction and Capitalized Interest.

Deferrals:

Capitalized Interest  
AFUDC - Debt

\$ 453,031  
(166,940)

Total Adjustment

\$ 286,091

Jurisdictional allocation percentage

100%

Jurisdictional amount

To Sch C-3 Summary <---

\$ 286,091

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SMART GRID AMORTIZATION ADJUSTMENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.11  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.11a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate amortization in test period for O&M related to Smart Grid.

Total (2,827,689)

Jurisdictional allocation percentage 100%

Jurisdictional amount To Sch C-3 Summary <--- \$ (2,827,689)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
STATE TAX RIDER  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.12  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):: WPC-3.12a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate the State Tax Rider revenue and expense.

Revenue	\$ (7,631,139)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (7,631,139)
	To Sch C-3 Summary <---
Taxes Other Than Income Taxes	\$ (7,417,119)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (7,417,119)
	To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
BUDGET EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.13  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.13a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reduce budgeted accounts to normalized levels

Account	
903 Customer Records and Collections	\$ (936,675)
924 Property Insurance	(927,533)
925 Injuries & Damages	121,241
929 Duplicate Charges - Credit	(423,765)
930.2 Miscellaneous General Expense	(446,512)
931 Rents	(1,479,069)
Total (a)	\$ (4,092,313)

Jurisdictional allocation percentage

100%

Jurisdictional amount

\$ (4,092,313)

(a) Derived from Staff Data Request #'s 12, 89, 92

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ELIMINATE NON-JURISDICTIONAL EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.14  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.14a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate non-jurisdictional operating expenses.

Distribution Expense	\$ (50)
Sales Expense	(178,452)
Administrative & General Expense	<u>(173,782)</u>
Total Adjustment	\$ (352,284)
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	\$ <u>(352,284)</u>

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZATION OF PUCO AND OCC ASSESSMENTS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.15  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.15a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To annualize the level of PUCO, OCC, and Division of Forecasting assessments to the latest known level, and to recover refunds of assessment never collected from customer.

Annualize PUCO, OCC and Division of Forecasting Assessments	\$ (282,701)
Amortize OCC Assessment per Case No. 11-5384-AU-UNC	<u>0</u>
Total	(282,701)
Jurisdictional allocation percentage	<u>100.000%</u>
Jurisdictional amount	<u><u>\$ (282,701)</u></u>

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADJUST UNCOLLECTIBLE EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.16  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.16a

PURPOSE and DESCRIPTION		AMOUNT
PURPOSE AND DESCRIPTION: To eliminate Rider UE-G revenues and annualize uncollectible expense not being recovered via Rider UE-G.		
Eliminate Rider Revenue		1,735,948
Jurisdictional allocation percentage		100%
Jurisdictional amount	To Sch C-3 Summary <---	\$ 1,735,948
Annualize Uncollectible Expense (A)		\$ 497,562
Jurisdictional allocation percentage		100%
Jurisdictional amount	To Sch C-3 Summary <---	\$ 497,562
Eliminate Regulatory Asset Deferral Accounting		1,918,247
Jurisdictional allocation percentage		100%
Jurisdictional amount	To Sch C-3 Summary <---	\$ 1,918,247

(A) Expenses not being recovered via Rider UE-G.

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZE PENSION AND BENEFITS EXPENSE

FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.17  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.17a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To annualize pension and benefits

Total	\$ (2,494,313)
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	\$ <u>(2,494,313)</u>

To Sch C-3 Summary <---



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZE PAYROLL TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.18  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.18a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To annualize payroll taxes.

Total	\$ (656,002)
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <--- \$ <u>(656,002)</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.19  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION:

Total	\$ -
Jurisdictional allocation percentage	100%
Jurisdictional amount	<div> To Sch C-3 Summary &lt;--- </div> \$ -

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZE AMORTIZATION OF PISCC  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.20  
PAGE 1 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.20a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the adjustment to annualize amortization of Post In Service Carrying Costs accrued as of March 31, 2012.

Total	\$ 304,766
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <--- \$ <u>304,766</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ANNUALIZE AMORTIZATION OF PISCC  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.20  
PAGE 2 OF 2

WORK PAPER REFERENCE NO(S): WPC-3.20a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To reflect the adjustment to current and deferred income taxes as a result of the annualization of amortization of PISCC accrued as of March 31, 2012.

Deferred Income Tax	\$ (106,668)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (106,668)

To Sch C-3 Summary <---  
To Sch C-4, Line 16 <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.21  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: Reserved for future use.

Total	\$ -
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <--- \$ -

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
AMORTIZE CAMERA WORK  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.22  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.22a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To amortize the estimated balance in account 0182385, Camera Costs AMRP-Reg Asset, as of December 31, 2012, over a period of three years.

Total	\$ 1,666,667
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	<u>\$ 1,666,667</u>

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ELIMINATE MERGER COSTS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.23  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):: WPC-3.23a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To eliminate the costs to achieve the merger with Progress Energy included in the test year.

Total	\$ (168,997)
Jurisdictional allocation percentage	100%
Jurisdictional amount	\$ (168,997)

To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADDITIONAL CAMERA WORK EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.24  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.24a

PURPOSE AND DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE AND DESCRIPTION: To annualize ongoing camera work expense.

Total \$ (150,000)

Jurisdictional allocation percentage 100%

Jurisdictional amount \$ (150,000)

To Sch C-3 Summary <---



DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.25  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION:

Total	\$ -
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	<u>\$ -</u>
	To Sch C-3 Summary <---

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
SMART GRID SAVINGS ADJUSTMENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.26  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.26a

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION: To adjust revenue requirement to eliminate double count of savings guaranteed for the gas Smart Grid program per the Stipulation in Case No. 10-2326-GE-RDR.

Net Savings \$ (3,271,937)

Jurisdictional allocation percentage 100%

Jurisdictional amount To Sch C-3 Summary <---  
\$ (3,271,937)

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INCREASED MEDICAL COSTS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.27  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): WPC-3.27a

PURPOSE and DESCRIPTION	TOTAL AMOUNT
PURPOSE and DESCRIPTION: To adjust expenses for increased medical costs.	
Medical Costs Adjustment	\$ 312,105
Jurisdictional allocation percentage	100%
Jurisdictional amount	To Sch C-3 Summary <---
	\$ 312,105

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK

FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.28  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S)::

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION:

Total	\$ -
Jurisdictional allocation percentage	100%
Jurisdictional amount	To Sch C-3 Summary <---
	\$ -

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
INTENTIONALLY LEFT BLANK

FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-3.29  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S):

PURPOSE and DESCRIPTION	AMOUNT
-------------------------	--------

PURPOSE and DESCRIPTION:

Total	\$ -
Jurisdictional allocation percentage	<u>100%</u>
Jurisdictional amount	To Sch C-3 Summary <-- \$ <u>-</u>

DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
ADJUSTED JURISDICTIONAL FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2012

SCHEDULE C-4  
PAGE 1 OF 1

WORK PAPER REFERENCE NO(S): SCHEDULE C-4.1, WPC-4.1a

LINE NO.	DESCRIPTION	AT CURRENT RATES			AT PROPOSED RATES	
		SCHEDULE C-3			PROFORMA	
		UNADJUSTED	ADJUSTMENTS	ADJUSTED	ADJUSTMENTS	PROFORMA
		(1)	(2)	(3)	(4)	(5)
		(\$)	(\$)	(\$)	(\$)	(\$)
1	Operating Income before Federal					
2	Income Taxes	77,780,821	19,493,015	97,273,836	44,365,931	141,639,767
3						
4	Reconciling Items:					
5	Interest Charges	(19,527,647)	(2,345,005)	(21,872,652)	0	(21,872,652)
6	Net Interest Charges	(19,527,647)	(2,345,005)	(21,872,652)	0	(21,872,652)
7						
8	Tax Depreciation	(111,690,697)	0	(111,690,697)	0	(111,690,697)
9	Book Depreciation	43,361,628	2,685,813	46,047,441	0	46,047,441
10	Excess of Tax over Book Depreciation	(68,329,069)	2,685,813	(65,643,256)	0	(65,643,256)
11						
12	Other Reconciling Items:					
13	Permanent Differences	99,672	0	99,672	0	99,672
14	Temporary Differences	(25,895,100)	(512,638)	(26,407,738)	0	(26,407,738)
15	Total Other Reconciling Items	(25,795,428)	(512,638)	(26,308,066)	0	(26,308,066)
16	Total Reconciling Items	(113,652,144)	(171,830)	(113,823,974)	0	(113,823,974)
17	Federal Taxable Income	(35,871,323)	19,321,185	(16,550,138)	44,365,931	27,815,793
18						
19	Federal Income Taxes:					
20	First \$50,000	50,000 @ 15%	7,500	7,500		7,500
21	Next \$25,000	25,000 @ 25%	6,250	6,250		6,250
22	Next \$25,000	25,000 @ 34%	8,500	8,500		8,500
23	Next \$235,000	235,000 @ 39%	91,650	91,650		91,650
24	Next \$9,665,000	9,665,000 @ 34%	3,286,100	3,286,100		3,286,100
25	Next \$5,000,000	5,000,000 @ 35%	1,750,000	1,750,000		1,750,000
26	Next \$3,333,333	3,333,333 @ 38%	1,266,667	1,266,667		1,266,667
27	Over \$18,333,333 (A)	(54,204,656) @ 35%	(18,971,630)	(12,209,215)	15,528,076	3,318,861
28	Federal Income Taxes		(12,554,963)	(5,792,548)	15,528,076	9,735,528
29						
30	Deferred Income Taxes:					
31	Deferred Income Tax on Depreciation	24,039,299	(940,035)	23,099,264		23,099,264
32	Other Deferred Income Taxes - Net	9,063,285	179,423	9,242,708		9,242,708
33	Deferred Income Tax Adjustment - ARAM	4,128		4,128		4,128
34	Deferred Income Tax Adjustment - Flow-Through	592,325		592,325		592,325
35	Amortization of Investment Tax Credit	(219,046)	0	(219,046)		(219,046)
36	Total Deferred Income Taxes	33,479,991	(760,612)	32,719,379	0	32,719,379
37						
38	Total Federal Income Taxes	20,925,028	6,001,803	26,926,831	15,528,076	42,454,907

(A) Calculation may be different due to rounding

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**Rate of Return Summary**  
**Capital Structure as of March 31, 2012**

**SCHEDULE D-1**

	Amount \$	% of Total	% Cost	Weighted Cost %
Long Term Debt	\$2,532,502,631	46.70%	5.32%	2.48%
Preferred Stock	\$0	0.00%	0.00%	0.00%
Common Equity	\$2,890,859,857	53.30%	9.84% -8.82%	5.25% -4.70%
Total Capital	\$5,423,362,488	100.00%		7.73% -7.19%

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**Equity Issuance Cost Adjustment**  
**March 31, 2012**

**SCHEDULE D-1.1**

(1) Retained Earnings <sup>1</sup>	\$1,186,641,118
(2) Total Common Equity <sup>2</sup>	\$2,497,378,912
(3) Ratio of (1) to (2)	0.47515
(4) Generic Issuance Cost, f	3.50%
(5) External Equity Ratio, w [1.0 - (3)]	0.52485
(6) Net Adjustment Factor, $(w/(1 - f)) + (1 - w)$	1.01904
(7) Low End Equity Cost [8.78% x (6)]	8.82%
(8) High End Equity Cost [9.78% x (6)]	9.84%

**Sources:**

- 1 Applicant's Schedule D-5A
- 2 Applicant's Schedule D-1



**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**  
**PAGE 1 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
9/30/2011	1.92	2.92
10/3/2011	1.78	2.76
10/4/2011	1.78	2.76
10/5/2011	1.90	2.88
10/6/2011	1.99	2.95
10/7/2011	2.07	3.02
10/10/2011	2.08	3.02
10/11/2011	2.16	3.11
10/12/2011	2.23	3.21
10/13/2011	2.17	3.14
10/14/2011	2.23	3.21
10/17/2011	2.15	3.14
10/18/2011	2.15	3.16
10/19/2011	2.16	3.17
10/20/2011	2.18	3.20
10/21/2011	2.20	3.25
10/24/2011	2.23	3.28
10/25/2011	2.13	3.14
10/26/2011	2.20	3.22
10/27/2011	2.39	3.45
10/28/2011	2.31	3.35
10/31/2011	2.17	3.20
11/1/2011	2.00	3.01
11/2/2011	2.01	3.04
11/3/2011	2.07	3.12
11/4/2011	2.05	3.10
11/7/2011	1.99	3.04
11/8/2011	2.07	3.12
11/9/2011	1.96	3.02
11/10/2011	2.06	3.11
11/11/2011	2.06	3.11
11/14/2011	2.04	3.09
11/15/2011	2.06	3.10
11/16/2011	2.02	3.06
11/17/2011	1.96	2.97
11/18/2011	2.01	3.00
11/21/2011	1.96	2.94
11/22/2011	1.94	2.91
11/23/2011	1.88	2.82
11/25/2011	1.97	2.92

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 2 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
11/28/2011	1.96	2.91
11/29/2011	2.00	2.96
11/30/2011	2.07	3.06
12/1/2011	2.12	3.13
12/2/2011	2.04	3.04
12/5/2011	2.05	3.04
12/6/2011	2.09	3.11
12/7/2011	2.02	3.04
12/8/2011	1.97	3.00
12/9/2011	2.05	3.10
12/12/2011	2.01	3.05
12/13/2011	1.96	3.00
12/14/2011	1.90	2.90
12/15/2011	1.91	2.93
12/16/2011	1.85	2.86
12/19/2011	1.81	2.80
12/20/2011	1.92	2.93
12/21/2011	1.97	3.00
12/22/2011	1.95	2.98
12/23/2011	2.03	3.06
12/27/2011	2.01	3.04
12/28/2011	1.91	2.90
12/29/2011	1.90	2.91
12/30/2011	1.87	2.89
1/3/2012	1.96	2.99
1/4/2012	2.00	3.04
1/5/2012	1.99	3.06
1/6/2012	1.96	3.02
1/9/2012	1.96	3.03
1/10/2012	1.97	3.03
1/11/2012	1.90	2.96
1/12/2012	1.93	2.98
1/13/2012	1.85	2.90
1/17/2012	1.85	2.89
1/18/2012	1.90	2.95
1/19/2012	1.97	3.04
1/20/2012	2.03	3.10
1/23/2012	2.07	3.15
1/24/2012	2.06	3.16
1/25/2012	2.01	3.15
1/26/2012	1.93	3.09

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 3 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
1/27/2012	1.90	3.06
1/30/2012	1.84	2.98
1/31/2012	1.80	2.93
2/1/2012	1.85	3.02
2/2/2012	1.83	3.01
2/3/2012	1.95	3.15
2/6/2012	1.90	3.09
2/7/2012	1.97	3.14
2/8/2012	1.98	3.14
2/9/2012	2.05	3.19
2/10/2012	1.97	3.12
2/13/2012	1.99	3.14
2/14/2012	1.92	3.07
2/15/2012	1.93	3.09
2/16/2012	1.99	3.15
2/17/2012	2.01	3.16
2/21/2012	2.05	3.19
2/22/2012	2.01	3.15
2/23/2012	1.98	3.12
2/24/2012	1.98	3.10
2/27/2012	1.92	3.04
2/28/2012	1.93	3.06
2/29/2012	1.98	3.09
3/1/2012	2.04	3.16
3/2/2012	1.99	3.11
3/5/2012	2.01	3.14
3/6/2012	1.94	3.08
3/7/2012	1.97	3.12
3/8/2012	2.01	3.17
3/9/2012	2.04	3.19
3/12/2012	2.03	3.17
3/13/2012	2.11	3.25
3/14/2012	2.27	3.41
3/15/2012	2.28	3.41
3/16/2012	2.30	3.41
3/19/2012	2.38	3.48
3/20/2012	2.37	3.46
3/21/2012	2.29	3.38
3/22/2012	2.28	3.36
3/23/2012	2.24	3.31
3/26/2012	2.24	3.33

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 4 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
3/27/2012	2.19	3.30
3/28/2012	2.20	3.30
3/29/2012	2.16	3.27
3/30/2012	2.22	3.35
4/2/2012	2.19	3.34
4/3/2012	2.28	3.41
4/4/2012	2.24	3.38
4/5/2012	2.17	3.32
4/9/2012	2.04	3.18
4/10/2012	1.99	3.14
4/11/2012	2.03	3.18
4/12/2012	2.05	3.21
4/13/2012	2.00	3.15
4/16/2012	1.97	3.11
4/17/2012	2.01	3.15
4/18/2012	1.98	3.13
4/19/2012	1.95	3.11
4/20/2012	1.97	3.13
4/23/2012	1.93	3.08
4/24/2012	1.96	3.11
4/25/2012	1.98	3.15
4/26/2012	1.96	3.13
4/27/2012	1.93	3.12
4/30/2012	1.91	3.11
5/1/2012	1.96	3.16
5/2/2012	1.92	3.11
5/3/2012	1.92	3.11
5/4/2012	1.88	3.07
5/7/2012	1.88	3.07
5/8/2012	1.84	3.02
5/9/2012	1.84	3.04
5/10/2012	1.88	3.05
5/11/2012	1.84	3.02
5/14/2012	1.79	2.95
5/15/2012	1.78	2.93
5/16/2012	1.76	2.91
5/17/2012	1.70	2.81
5/18/2012	1.70	2.79
5/21/2012	1.74	2.79
5/22/2012	1.79	2.89
5/23/2012	1.72	2.79

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 5 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
5/24/2012	1.76	2.85
5/25/2012	1.75	2.85
5/29/2012	1.73	2.84
5/30/2012	1.62	2.72
5/31/2012	1.58	2.67
6/1/2012	1.47	2.54
6/4/2012	1.53	2.57
6/5/2012	1.56	2.62
6/6/2012	1.65	2.72
6/7/2012	1.65	2.76
6/8/2012	1.64	2.77
6/11/2012	1.60	2.72
6/12/2012	1.66	2.77
6/13/2012	1.60	2.71
6/14/2012	1.61	2.71
6/15/2012	1.59	2.69
6/18/2012	1.58	2.68
6/19/2012	1.62	2.73
6/20/2012	1.64	2.72
6/21/2012	1.62	2.69
6/22/2012	1.67	2.76
6/25/2012	1.61	2.68
6/26/2012	1.63	2.70
6/27/2012	1.62	2.69
6/28/2012	1.58	2.67
6/29/2012	1.66	2.76
7/2/2012	1.58	2.68
7/3/2012	1.63	2.74
7/5/2012	1.60	2.72
7/6/2012	1.54	2.66
7/9/2012	1.51	2.62
7/10/2012	1.50	2.59
7/11/2012	1.50	2.59
7/12/2012	1.48	2.56
7/13/2012	1.50	2.58
7/16/2012	1.46	2.55
7/17/2012	1.50	2.60
7/18/2012	1.48	2.58
7/19/2012	1.51	2.61
7/20/2012	1.46	2.55
7/23/2012	1.43	2.52

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 6 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
7/24/2012	1.40	2.47
7/25/2012	1.41	2.47
7/26/2012	1.43	2.49
7/27/2012	1.55	2.64
7/30/2012	1.50	2.58
7/31/2012	1.49	2.58
8/1/2012	1.54	2.61
8/2/2012	1.48	2.55
8/3/2012	1.58	2.66
8/6/2012	1.56	2.65
8/7/2012	1.63	2.72
8/8/2012	1.64	2.74
8/9/2012	1.69	2.75
8/10/2012	1.65	2.74
8/13/2012	1.65	2.74
8/14/2012	1.73	2.83
8/15/2012	1.80	2.91
8/16/2012	1.84	2.96
8/17/2012	1.82	2.93
8/20/2012	1.81	2.93
8/21/2012	1.80	2.91
8/22/2012	1.72	2.83
8/23/2012	1.67	2.78
8/24/2012	1.68	2.79
8/27/2012	1.65	2.76
8/28/2012	1.63	2.74
8/29/2012	1.65	2.77
8/30/2012	1.62	2.74
8/31/2012	1.56	2.68
9/4/2012	1.58	2.69
9/5/2012	1.59	2.70
9/6/2012	1.67	2.80
9/7/2012	1.66	2.83
9/10/2012	1.68	2.84
9/11/2012	1.70	2.85
9/12/2012	1.76	2.93
9/13/2012	1.76	2.97
9/14/2012	1.87	3.09
9/17/2012	1.84	3.04
9/18/2012	1.81	3.01
9/19/2012	1.78	2.98

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**CAPM Cost of Equity Estimate**

**SCHEDULE 1.3**

**PAGE 7 OF 7**

<b>Date</b>	<b>Close 10Yr Yld (%)</b>	<b>Close 30Yr Yld (%)</b>
9/20/2012	1.78	2.95
9/21/2012	1.76	2.96
9/24/2012	1.72	2.90
9/25/2012	1.68	2.86
9/26/2012	1.62	2.79
9/27/2012	1.64	2.82
9/28/2012	1.64	2.83

Averages:

Last 64days	1.6259	2.7453
Last 127 days	1.7191	2.7451
Last 190 days	1.8185	2.7461
Last 252 days	1.8722	2.9652
	1.7589	2.7480

2.2535

CAPM Cost of Equity Estimate	5.9015
---------------------------------	--------

$$\begin{aligned}\text{CAPM} &= \text{risk free return} + \beta(\text{large company total return} - \text{risk free return}) \\ &= 2.253\% + (.64) * (11.8\% - 6.1\%)\end{aligned}$$

Source: Yahoo.com

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 1 OF 7**

<b>Stock Prices<sup>1</sup> (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
9/30/2011	48.7800	57.2300	54.7800	32.5100	23.7600
10/3/2011	47.8800	56.4300	54.2600	30.9700	23.3800
10/4/2011	47.2500	56.2300	54.2200	30.2100	23.0300
10/5/2011	47.5700	55.8000	52.9800	30.0400	23.2300
10/6/2011	48.0400	56.1100	53.9500	30.8600	23.7300
10/7/2011	48.3000	56.6600	53.9100	30.9600	23.6800
10/10/2011	49.1900	58.0000	54.9700	31.8400	23.9900
10/11/2011	48.5900	57.0600	54.5300	31.2200	23.7000
10/12/2011	48.2000	56.6900	54.3800	31.4500	23.7600
10/13/2011	48.0800	56.6900	54.4300	31.8200	23.7600
10/14/2011	48.5100	57.0300	55.2900	32.1800	23.9400
10/17/2011	48.0600	57.5700	55.6900	31.7700	23.8400
10/18/2011	48.4900	57.6000	55.7400	32.2000	24.1300
10/19/2011	48.9600	57.8300	55.6400	32.2300	24.2200
10/20/2011	49.0400	57.9500	56.1900	32.2400	24.4700
10/21/2011	50.0300	58.8300	57.4100	32.6200	24.7300
10/24/2011	49.3800	58.2900	56.9200	32.8300	24.5600
10/25/2011	48.7100	57.6600	55.8900	32.2900	24.3300
10/26/2011	49.1400	58.1200	56.5100	32.7700	24.5200
10/27/2011	49.9700	59.0600	57.1900	33.7500	25.2100
10/28/2011	49.3500	58.5800	55.7600	33.4100	24.9300
10/31/2011	49.5700	58.4600	55.6000	33.4000	24.8700
11/1/2011	48.4200	57.8300	54.8100	32.4500	24.2600
11/2/2011	49.2200	58.4900	55.7400	33.0600	24.8500
11/3/2011	49.6700	59.5800	56.4400	33.5900	25.2100
11/4/2011	49.5400	59.0900	56.2600	33.4900	25.0700
11/7/2011	50.3900	59.6900	56.7500	33.2400	25.2000
11/8/2011	50.5700	59.6400	57.0200	33.2500	25.3400
11/9/2011	49.2700	58.8600	55.9300	32.5700	24.7500
11/10/2011	49.3300	59.4100	56.5700	33.1100	25.0100
11/11/2011	50.0200	60.1200	57.3000	33.8900	25.3100
11/14/2011	49.7000	59.6400	56.6500	33.2800	24.9600
11/15/2011	49.5400	59.2100	57.0200	33.7100	25.2000
11/16/2011	49.0200	58.6300	56.2600	33.1600	24.8500
11/17/2011	48.8400	58.2500	56.0900	32.7800	24.6300
11/18/2011	49.0400	58.4500	56.4200	33.3300	24.9400
11/21/2011	48.6700	58.0500	55.7900	32.6500	24.6900
11/22/2011	48.0800	57.7300	55.2200	32.4700	24.3000
11/23/2011	47.3700	56.8900	54.7800	31.8300	24.0000
11/25/2011	47.5700	57.3500	55.4700	32.0600	24.2500
11/28/2011	48.1400	57.9300	55.5400	32.2700	24.4100
11/29/2011	48.8500	58.5700	56.2600	32.5600	24.7400
11/30/2011	50.0800	60.4200	57.6700	33.4400	25.3000
12/1/2011	49.8200	59.9900	57.7500	33.6700	25.2000



**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 2 OF 7**

<b>Stock Prices1 (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
12/2/2011	49.0500	59.7600	56.8800	33.1800	24.8600
12/5/2011	48.9900	59.9900	57.1600	33.2900	25.0100
12/6/2011	48.8400	59.9300	57.2700	33.2200	25.1000
12/7/2011	48.9900	60.0200	56.9800	33.0500	25.0700
12/8/2011	48.6400	59.3800	56.6500	32.3900	24.6800
12/9/2011	49.2500	60.4500	57.4900	33.1400	25.0000
12/12/2011	48.8100	59.7300	57.0800	33.0800	24.9300
12/13/2011	48.9700	60.4800	57.3900	33.4800	24.9800
12/14/2011	48.6800	60.4200	57.0600	33.1300	24.8900
12/15/2011	49.2600	60.9700	58.0100	33.5100	25.4200
12/16/2011	49.1400	60.8900	58.0200	33.5600	25.4100
12/19/2011	48.8600	60.7700	57.8400	33.3400	25.3200
12/20/2011	50.5600	62.0200	59.0000	33.6300	26.0800
12/21/2011	51.2100	62.7400	59.9200	33.9800	26.4000
12/22/2011	51.1500	62.6800	59.8000	34.1000	26.2300
12/23/2011	51.3700	63.4400	60.1500	34.5000	26.4200
12/27/2011	51.8400	63.7300	60.6500	34.9000	26.8300
12/28/2011	51.5000	63.5000	60.3500	34.9000	26.6700
12/29/2011	51.9300	63.9300	60.7400	35.2800	26.9200
12/30/2011	51.5000	63.7600	60.2000	35.1200	26.8500
1/3/2012	50.9300	62.6600	58.8600	34.7600	26.5600
1/4/2012	50.5200	62.3700	58.1300	34.1500	26.3800
1/5/2012	50.4100	62.3400	57.9800	34.1300	26.5000
1/6/2012	49.9000	62.3400	57.3600	34.0800	26.4200
1/9/2012	49.8300	62.2200	57.5200	33.6000	26.4400
1/10/2012	49.7600	62.2200	57.5900	33.5600	26.6500
1/11/2012	49.6400	62.0200	57.4300	33.3400	26.3100
1/12/2012	49.4100	61.6700	57.2400	33.3600	25.9300
1/13/2012	49.0900	61.7600	57.4300	33.3300	25.9800
1/17/2012	49.2800	61.7900	57.5900	33.3100	25.9400
1/18/2012	48.9200	61.7900	57.5300	33.2200	26.0500
1/19/2012	48.8000	61.5500	57.0100	32.6500	25.8300
1/20/2012	49.0600	61.7300	57.0300	33.4500	25.8400
1/23/2012	48.9700	61.6400	56.8900	33.5200	25.8400
1/24/2012	48.8100	61.2600	56.6600	33.6400	25.7600
1/25/2012	49.5800	61.9000	57.6200	33.9900	26.3000
1/26/2012	49.3300	62.2200	58.0100	34.3400	26.6300
1/27/2012	48.0800	61.3800	57.1500	33.8100	26.2100
1/30/2012	47.8700	61.2400	56.9100	33.6300	25.7900
1/31/2012	48.5500	61.7600	57.2200	33.8300	25.8400
2/1/2012	48.9200	62.1900	57.2700	34.2300	25.8400
2/2/2012	49.0000	61.9300	57.1300	34.1800	25.6000
2/3/2012	48.8800	62.0200	57.0800	34.3700	25.7600
2/6/2012	48.7700	61.6400	57.0600	34.3400	25.6500

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 3 OF 7**

<b>Stock Prices<sup>1</sup> (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
2/7/2012	48.9200	62.2500	57.3800	34.5500	25.8000
2/8/2012	48.7000	61.9600	57.6400	34.6800	25.8200
2/9/2012	48.3700	62.1900	57.7100	34.5300	25.8100
2/10/2012	48.4200	62.2500	57.3800	34.2700	25.7400
2/13/2012	48.4400	62.1300	56.7800	34.0700	25.6800
2/14/2012	48.7300	62.3100	56.8400	33.9800	25.6400
2/15/2012	48.5900	61.1900	56.5300	34.5800	25.4700
2/16/2012	48.9200	61.8700	56.7700	35.2100	25.6000
2/17/2012	49.0600	61.2800	56.7400	35.1500	25.6100
2/21/2012	48.6400	61.1600	56.7300	35.0400	25.6700
2/22/2012	48.9600	61.3700	56.7300	34.9900	25.7200
2/23/2012	49.4200	61.2500	56.8300	34.8000	25.7200
2/24/2012	49.7900	61.8700	57.6900	34.9100	25.7200
2/27/2012	49.8800	61.7800	57.2900	34.7300	25.7700
2/28/2012	49.7200	61.6000	56.9800	34.7200	25.6500
2/29/2012	49.4700	61.3400	56.9700	35.2400	25.7300
3/1/2012	49.4100	61.5500	57.1500	35.3800	25.6300
3/2/2012	49.5200	61.6900	57.1700	35.4200	25.5700
3/5/2012	49.8200	61.8400	57.2500	35.8400	25.6800
3/6/2012	49.5200	61.6300	57.2100	35.2500	25.5000
3/7/2012	49.4900	61.6600	57.0200	35.5800	25.6000
3/8/2012	49.6000	62.0100	57.1800	36.0100	25.7500
3/9/2012	49.7600	62.0100	57.2500	36.1700	25.9300
3/12/2012	50.3200	62.6600	58.0600	36.4300	26.2700
3/13/2012	50.3500	62.8400	58.2400	36.8600	26.3500
3/14/2012	49.5500	62.0100	57.4500	36.0700	25.8600
3/15/2012	49.4800	61.9600	56.9500	36.0400	25.6300
3/16/2012	49.3300	61.7800	56.5000	35.7600	25.6400
3/19/2012	49.2700	61.4000	56.3000	35.6900	25.4800
3/20/2012	49.6400	61.2500	56.4200	35.8600	25.8100
3/21/2012	49.4600	61.1100	56.2000	35.7100	25.7700
3/22/2012	49.4200	61.1900	56.1400	35.7200	25.7600
3/23/2012	49.2900	60.9600	56.0200	36.0700	25.6800
3/26/2012	49.7100	61.4900	56.4600	36.4600	25.8700
3/27/2012	50.0000	61.7500	56.6800	36.5000	25.9700
3/28/2012	49.6900	61.3100	56.5300	36.2200	25.7900
3/29/2012	49.7800	61.3100	56.8700	36.5300	25.8800
3/30/2012	50.2000	61.6000	57.2800	36.4400	25.9700
4/2/2012	50.4800	61.8700	57.4100	36.3700	26.0800
4/3/2012	50.5200	61.9800	57.6000	36.6600	26.2500
4/4/2012	50.5700	62.1300	57.5100	36.3500	26.1300
4/5/2012	50.3700	60.8700	57.0500	36.2200	25.9800
4/9/2012	49.8900	60.4300	56.6300	36.1200	25.8900
4/10/2012	49.2100	59.7300	56.0300	35.2500	25.5700

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 4 OF 7**

<b>Stock Prices<sup>1</sup> (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
4/11/2012	49.1800	59.6700	56.2700	35.0700	25.5100
4/12/2012	49.3100	59.7600	56.7400	35.0700	25.6600
4/13/2012	49.2900	59.8400	56.6200	35.1500	25.5300
4/16/2012	49.7400	60.4900	57.0900	35.5400	25.8900
4/17/2012	49.9800	61.0500	57.0900	35.6500	26.0100
4/18/2012	49.6200	61.6300	56.8800	35.5300	25.8700
4/19/2012	49.5400	61.1900	56.7700	35.2600	25.8100
4/20/2012	50.0100	61.6000	57.4700	35.7900	26.2500
4/23/2012	49.8500	61.3700	57.1900	35.4200	26.0000
4/24/2012	49.8100	62.1000	57.5900	35.7400	26.2000
4/25/2012	50.2300	62.4200	57.8700	35.9000	26.4200
4/26/2012	50.8700	62.6900	58.1300	36.0300	26.4400
4/27/2012	51.0400	62.8400	58.1500	36.1500	26.5600
4/30/2012	51.1600	62.8400	58.2900	36.1000	26.5500
5/1/2012	51.4000	63.1300	58.5000	36.4100	26.5500
5/2/2012	51.0800	62.9800	58.1500	36.3500	26.4000
5/3/2012	50.8900	62.7500	58.0100	35.1700	26.4000
5/4/2012	50.9600	63.2200	58.2200	35.4000	26.4700
5/7/2012	50.8500	62.9500	57.9900	35.2300	26.4200
5/8/2012	50.9300	63.1900	58.5400	35.5700	26.7700
5/9/2012	50.6500	63.3300	58.3100	35.5200	26.6700
5/10/2012	51.0800	63.8900	58.8500	35.7900	26.9800
5/11/2012	51.1900	63.6900	58.6400	35.9000	26.9800
5/14/2012	51.2400	63.6000	58.4600	35.5400	26.9700
5/15/2012	51.2700	63.5700	58.1900	35.1300	26.6600
5/16/2012	51.4700	63.4500	58.2700	34.9000	26.9300
5/17/2012	50.8700	63.5700	58.0100	34.4600	26.7300
5/18/2012	51.2600	63.6600	58.1100	34.3000	26.7400
5/21/2012	51.2000	63.4500	58.2500	35.0800	26.8000
5/22/2012	51.4300	64.2200	58.4700	35.5900	27.2700
5/23/2012	51.1800	64.0700	58.6700	35.6100	27.1800
5/24/2012	51.4600	64.6700	59.0300	35.6600	27.2500
5/25/2012	51.5100	65.1400	59.0500	35.7000	27.2700
5/29/2012	51.4600	65.2000	59.3900	36.0800	27.3400
5/30/2012	51.3500	64.8100	59.5300	35.6300	27.0800
5/31/2012	51.5500	65.2000	59.7900	35.6900	27.4900
6/1/2012	51.1200	66.3000	59.7200	36.0900	27.4300
6/4/2012	51.0300	66.6800	60.1300	35.8900	27.5900
6/5/2012	50.9700	67.0700	59.9800	35.8800	27.7500
6/6/2012	51.7400	67.3100	60.6900	36.6700	28.0000
6/7/2012	52.2200	67.9000	61.0900	36.7700	27.8700
6/8/2012	52.7100	68.6700	61.6500	37.0500	27.8900
6/11/2012	52.2900	68.1700	61.1900	36.9800	28.0300
6/12/2012	52.3100	68.1100	61.5900	37.0600	27.8900

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 5 OF 7**

<b>Stock Prices1 (\$)</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
6/13/2012	52.5300	67.7800	61.7600	37.2400	27.9200
6/14/2012	53.1900	68.6400	61.9900	37.7600	28.2100
6/15/2012	53.2500	69.0000	62.5000	38.1300	28.3200
6/18/2012	53.7600	69.0600	62.8800	38.3600	28.4700
6/19/2012	53.8500	68.5200	62.2000	38.2200	28.3700
6/20/2012	53.6400	67.7200	60.9200	37.6900	27.8800
6/21/2012	53.1500	67.4800	60.7000	37.2300	27.5800
6/22/2012	53.0900	67.8700	60.9200	37.4200	27.6000
6/25/2012	52.8200	68.0200	60.6600	37.2500	27.5800
6/26/2012	52.8500	67.9300	60.6700	37.6700	27.5100
6/27/2012	53.3900	68.2600	61.2500	37.9800	27.7600
6/28/2012	53.2400	68.4000	61.4800	37.9900	27.7900
6/29/2012	53.4700	68.4000	61.6000	38.4600	28.1300
7/2/2012	53.8600	69.0600	62.1300	38.7500	28.4500
7/3/2012	53.7000	67.9200	61.9800	38.9100	28.4400
7/5/2012	53.2500	67.8000	61.5000	38.4100	28.3600
7/6/2012	53.3000	65.4900	61.5500	38.3400	28.3100
7/9/2012	53.2400	64.5800	61.7500	38.2100	28.3700
7/10/2012	53.1700	65.4000	61.9400	38.3700	28.3600
7/11/2012	53.5100	65.7300	62.2800	38.4800	28.5200
7/12/2012	53.1700	65.8900	62.2700	38.7300	28.4800
7/13/2012	53.6600	65.9900	62.8200	39.5200	28.6100
7/16/2012	53.6600	65.9900	62.5400	39.2200	28.6000
7/17/2012	53.7000	65.6000	62.8100	39.6700	28.7600
7/18/2012	53.8400	65.3300	62.9000	39.9000	28.8800
7/19/2012	53.6600	65.3800	62.7600	40.1100	28.7500
7/20/2012	53.4300	65.4800	63.1700	39.9000	28.9200
7/23/2012	52.9800	64.7700	62.9600	39.4200	28.6400
7/24/2012	52.4900	64.5400	62.9800	38.9800	28.4400
7/25/2012	52.7700	65.0800	62.8800	39.1200	28.4000
7/26/2012	53.6000	66.5800	63.8100	39.6900	28.8500
7/27/2012	54.4300	66.7000	64.2900	39.6000	29.1600
7/30/2012	54.3800	67.3100	64.3200	40.2000	29.2900
7/31/2012	53.7800	67.0200	63.8900	39.5200	29.0200
8/1/2012	53.4800	66.7600	63.8400	38.7500	28.9600
8/2/2012	53.2800	66.7000	63.6400	38.9000	28.6700
8/3/2012	53.8800	67.8300	64.0500	39.2100	29.0400
8/6/2012	53.8000	67.4400	63.9400	39.2100	29.0000
8/7/2012	53.4500	67.2900	63.6900	39.1200	28.6700
8/8/2012	53.1400	67.2800	63.2800	39.0900	28.5900
8/9/2012	53.1100	67.3300	62.9900	38.8500	28.4500
8/10/2012	53.1900	67.0900	63.2600	39.2300	28.5800
8/13/2012	52.9300	67.4500	63.2900	38.9400	28.4700
8/14/2012	52.9800	67.4300	63.2000	38.8000	28.4900

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 6 OF 7**

<b>Stock Prices<sup>1</sup> (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
8/15/2012	53.2800	66.7700	62.6800	38.6700	28.3400
8/16/2012	53.4200	66.6900	61.8000	38.4200	28.2900
8/17/2012	53.3900	66.4900	61.6800	38.1900	28.2100
8/20/2012	53.5900	66.4400	61.9600	38.3300	28.2000
8/21/2012	53.2700	66.0600	61.3900	37.8700	28.0000
8/22/2012	53.0900	66.0000	61.6100	37.8300	27.9100
8/23/2012	52.6200	65.2400	60.9900	37.4000	27.3800
8/24/2012	52.9700	65.4700	61.4200	37.6300	27.6600
8/27/2012	53.5200	65.5100	61.2400	37.6200	27.7000
8/28/2012	53.4200	65.3700	61.2000	37.6800	27.6800
8/29/2012	52.9700	65.3100	60.7800	37.8000	27.6800
8/30/2012	52.5200	64.8100	60.7600	37.7100	27.5700
8/31/2012	52.4800	64.7800	60.6200	37.6700	27.6200
9/4/2012	52.5100	64.8100	60.8800	38.0100	27.8100
9/5/2012	52.5000	64.4700	60.3300	37.6800	27.7600
9/6/2012	53.7700	65.0000	61.0600	38.1600	28.0700
9/7/2012	53.1600	64.7200	60.6300	38.2400	27.8300
9/10/2012	53.2800	64.8300	60.4900	38.1200	27.8400
9/11/2012	52.9400	64.4600	60.3100	37.9400	27.7400
9/12/2012	52.7600	64.0500	60.1800	37.5900	27.6600
9/13/2012	53.5900	64.6600	60.9900	38.3200	28.0600
9/14/2012	52.8200	64.1900	59.8100	37.7500	27.8700
9/17/2012	52.6100	64.1400	59.6100	37.2800	27.5800
9/18/2012	52.2500	63.1600	59.4800	36.9400	27.4500
9/19/2012	52.3600	63.4300	59.4600	37.0100	27.4200
9/20/2012	52.7200	63.9300	59.4800	37.1700	27.4300
9/21/2012	52.7000	64.0800	59.1000	37.4300	27.3200
9/24/2012	53.1100	64.6500	59.4800	38.0800	27.5900
9/25/2012	52.6500	64.3400	59.4600	38.0400	27.6500
9/26/2012	52.8900	64.3300	60.0900	38.1000	27.7500
9/27/2012	52.8100	64.0600	59.5800	37.9200	27.4500
9/28/2012	52.9400	64.7900	59.8900	38.2300	27.7100
<b>AVERAGE (\$)</b>	<b>50.7739</b>	<b>62.7442</b>	<b>58.6316</b>	<b>35.5807</b>	<b>26.4610</b>
<b>QUARTERLY DIV.<sup>2</sup> (\$)</b>	<b>0.4925</b>	<b>0.7500</b>	<b>0.6000</b>	<b>0.2750</b>	<b>0.2600</b>
	<b>0.5275</b>	<b>0.7500</b>	<b>0.6050</b>	<b>0.2938</b>	<b>0.2600</b>
	<b>0.5275</b>	<b>0.7500</b>	<b>0.6050</b>	<b>0.3430</b>	<b>0.2600</b>
	<b>0.5275</b>	<b>0.7650</b>	<b>0.6050</b>	<b>0.3430</b>	<b>0.2700</b>
<b>ANNUAL DIVIDEND (\$)</b>	<b>2.0750</b>	<b>3.0150</b>	<b>2.4150</b>	<b>1.2548</b>	<b>1.0500</b>
<b>YIELD</b>	<b>4.09%</b>	<b>4.81%</b>	<b>4.12%</b>	<b>3.53%</b>	<b>3.97%</b>

**DUKE ENERGY OHIO, INC.  
CASE NO. 12-1685-GA-AIR  
DCF Cost of Equity Estimate**

**SCHEDULE D-1.4**

**PAGE 7 OF 7**

<b>Stock Prices<sup>1</sup> (\$):</b>	<b>D</b>	<b>DUK</b>	<b>ED</b>	<b>NU</b>	<b>XEL</b>
REUTERS <sup>3</sup>	5.70%	3.53%	3.22%	5.65%	4.88%
MSN <sup>4</sup>	5.00%	3.70%	3.40%	7.40%	5.50%
YAHOO <sup>5</sup>	5.50%	2.39%	3.02%	5.72%	5.08%
DCF GROWTH FACTOR VALUE LINE <sup>6</sup> :	5.40%	3.21%	3.21%	6.26%	5.15%
'10 EARNINGS (\$)	3.00	3.80	3.75	2.00	1.75
'14 EARNINGS (\$)	3.75	5.00	4.25	3.25	2.25
	5.58%	6.86%	3.13%	12.14%	6.28%
VALUE LINE, "BOXED"	5.00%	4.50%	4.00%	8.00%	6.00%
VALUE LINE	5.29%	5.68%	3.56%	10.07%	6.14%
DCF GROWTH ESTIMATE	5.37%	3.83%	3.30%	7.21%	5.40%
DCF COST OF EQUITY ESTIMATE	10.39%	10.38%	9.61%	10.56%	10.28%
DCF AVERAGE				10.24%	
CAPM COST OF EQUITY ESTIMATE				5.90%	
COST OF EQUITY ESTIMATE				9.16%	

**Sources:**

- 1 MSN Investor
- 2 MSN Investor & Value Line Investment Guide
- 3 investor.reuters.com
- 4 moneycentral.msn.com
- 5 finance.yahoo.com
- 6 Value Line Investment Guide

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**D Non-Constant DCF Calculation**

**SCHEDULE D-1.5**

g= 5.37%	non const dcf= 5.37%	const dcf= 9.68%
D= \$2.08	P= -\$50.77	g(e)= 6.52%

YEAR	GROWTH RATE	DIVIDEND
1	5.37%	\$2.19
2	5.37%	\$2.30
3	5.37%	\$2.43
4	5.37%	\$2.56
5	5.37%	\$2.70
6	5.43%	\$2.84
7	5.49%	\$3.00
8	5.54%	\$3.16
9	5.60%	\$3.34
10	5.66%	\$3.53
11	5.72%	\$3.73
12	5.77%	\$3.95
13	5.83%	\$4.18
14	5.89%	\$4.42
15	5.95%	\$4.69
16	6.00%	\$4.97
17	6.06%	\$5.27
18	6.12%	\$5.59
19	6.18%	\$5.94
20	6.23%	\$6.31
21	6.29%	\$6.70
22	6.35%	\$7.13
23	6.40%	\$7.59
24	6.46%	\$8.08
25	6.52%	\$8.60
26	6.52%	\$9.16
27	6.52%	\$9.76
28	6.52%	\$10.40
29	6.52%	\$11.07
30	6.52%	\$11.80

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**DUK Non-Constant DCF Calculation**

**SCHEDULE D-1.6**

g= 3.83%	non const dcf= 10.39%	const dcf= 8.81%
D= \$3.02	P= -\$62.74	g(e)= 6.52%

YEAR	GROWTH RATE	DIVIDEND
1	3.83%	\$3.13
2	3.83%	\$3.25
3	3.83%	\$3.37
4	3.83%	\$3.50
5	3.83%	\$3.64
6	3.96%	\$3.78
7	4.09%	\$3.94
8	4.23%	\$4.10
9	4.36%	\$4.28
10	4.50%	\$4.47
11	4.63%	\$4.68
12	4.77%	\$4.91
13	4.90%	\$5.15
14	5.04%	\$5.40
15	5.17%	\$5.68
16	5.31%	\$5.99
17	5.44%	\$6.31
18	5.58%	\$6.66
19	5.71%	\$7.04
20	5.85%	\$7.46
21	5.98%	\$7.90
22	6.12%	\$8.38
23	6.25%	\$8.91
24	6.38%	\$9.48
25	6.52%	\$10.10
26	6.52%	\$10.75
27	6.52%	\$11.45
28	6.52%	\$12.20
29	6.52%	\$13.00
30	6.52%	\$13.84

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9



**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**ED Non-Constant DCF Calculation**

**SCHEDULE D-1.7**

<b>g= 3.30%</b>	<b>non const</b> <b>dcf= 9.61%</b>	<b>const</b> <b>dcf= 7.56%</b>
<b>D= \$2.42</b>	<b>P= -\$58.63</b>	<b>g(e)= 6.52%</b>

YEAR	GROWTH RATE	DIVIDEND
1	3.30%	\$2.49
2	3.30%	\$2.58
3	3.30%	\$2.66
4	3.30%	\$2.75
5	3.30%	\$2.84
6	3.46%	\$2.94
7	3.62%	\$3.05
8	3.78%	\$3.16
9	3.94%	\$3.29
10	4.11%	\$3.42
11	4.27%	\$3.57
12	4.43%	\$3.72
13	4.59%	\$3.90
14	4.75%	\$4.08
15	4.91%	\$4.28
16	5.07%	\$4.50
17	5.23%	\$4.73
18	5.39%	\$4.99
19	5.55%	\$5.27
20	5.71%	\$5.57
21	5.88%	\$5.89
22	6.04%	\$6.25
23	6.20%	\$6.64
24	6.36%	\$7.06
25	6.52%	\$7.52
26	6.52%	\$8.01
27	6.52%	\$8.53
28	6.52%	\$9.09
29	6.52%	\$9.68
30	6.52%	\$10.31

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**NU Non-Constant DCF Calculation**

**SCHEDULE 1.8**

<b>g= 7.21%</b>  <b>D= \$1.25</b>	<b>non const</b> <b>dcf= 10.56%</b>  <b>P= -\$35.58</b>	<b>const</b> <b>dcf= 10.99%</b>  <b>g(e)= 6.52%</b>
---	--	--

YEAR	GROWTH RATE	DIVIDEND
1	7.21%	\$1.35
2	7.21%	\$1.44
3	7.21%	\$1.55
4	7.21%	\$1.66
5	7.21%	\$1.78
6	7.18%	\$1.90
7	7.14%	\$2.04
8	7.11%	\$2.19
9	7.07%	\$2.34
10	7.04%	\$2.50
11	7.00%	\$2.68
12	6.97%	\$2.87
13	6.93%	\$3.07
14	6.90%	\$3.28
15	6.86%	\$3.50
16	6.83%	\$3.74
17	6.80%	\$4.00
18	6.76%	\$4.27
19	6.73%	\$4.55
20	6.69%	\$4.86
21	6.66%	\$5.18
22	6.62%	\$5.52
23	6.59%	\$5.89
24	6.55%	\$6.27
25	6.52%	\$6.68
26	6.52%	\$7.12
27	6.52%	\$7.58
28	6.52%	\$8.08
29	6.52%	\$8.60
30	6.52%	\$9.16

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**XEL Non-Constant DCF Calculation**

**SCHEDULE D-1.9**

**g= 5.40%**

**non const**  
**dcf= 10.28%**

**const**  
**dcf= 9.58%**

**D= \$1.05**

**P= -\$26.46**

**g(e)= 6.52%**

<b>YEAR</b>	<b>GROWTH RATE</b>	<b>DIVIDEND</b>
1	5.40%	\$1.11
2	5.40%	\$1.17
3	5.40%	\$1.23
4	5.40%	\$1.30
5	5.40%	\$1.37
6	5.46%	\$1.44
7	5.51%	\$1.52
8	5.57%	\$1.60
9	5.62%	\$1.69
10	5.68%	\$1.79
11	5.74%	\$1.89
12	5.79%	\$2.00
13	5.85%	\$2.12
14	5.90%	\$2.25
15	5.96%	\$2.38
16	6.02%	\$2.52
17	6.07%	\$2.68
18	6.13%	\$2.84
19	6.18%	\$3.02
20	6.24%	\$3.20
21	6.30%	\$3.41
22	6.35%	\$3.62
23	6.41%	\$3.85
24	6.46%	\$4.10
25	6.52%	\$4.37
26	6.52%	\$4.65
27	6.52%	\$4.96
28	6.52%	\$5.28
29	6.52%	\$5.63
30	6.52%	\$5.99

This schedule is truncated; the calculation extends to 400 years to ensure the stability of the calculation.

g, D, P are from Schedule D-1.4  
g(e) is from Schedule D-1.9

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**Growth in U. S. Gross National Product, 1929-2011**

**SCHEDULE D-1.10**

**PAGE 1 OF 2**

<b>Year</b>	<b>GNP (\$billion)</b>	<b>Change (\$billion)</b>	<b>Growth%</b>
1929	104.4		
1930	91.9	-12.50	-11.97%
1931	77	-14.90	-16.21%
1932	59.1	-17.90	-23.25%
1933	56.7	-2.40	-4.06%
1934	66.3	9.60	16.93%
1935	73.6	7.30	11.01%
1936	84	10.40	14.13%
1937	92.2	8.20	9.76%
1938	86.5	-5.70	-6.18%
1939	92.5	6.00	6.94%
1940	101.7	9.20	9.95%
1941	127.2	25.50	25.07%
1942	162.3	35.10	27.59%
1943	198.9	36.60	22.55%
1944	220.1	21.20	10.66%
1945	223.3	3.20	1.45%
1946	222.9	-0.40	-0.18%
1947	245.2	22.30	10.00%
1948	270.6	25.40	10.36%
1949	268.5	-2.10	-0.78%
1950	295.2	26.70	9.94%
1951	341.2	46.00	15.58%
1952	360.3	19.10	5.60%
1953	381.2	20.90	5.80%
1954	382.4	1.20	0.31%
1955	417.2	34.80	9.10%
1956	440.2	23.00	5.51%
1957	464.1	23.90	5.43%
1958	469.8	5.70	1.23%
1959	509.4	39.60	8.43%
1960	529.6	20.20	3.97%
1961	548.3	18.70	3.53%
1962	589.7	41.40	7.55%
1963	622.2	32.50	5.51%
1964	668.6	46.40	7.46%
1965	724.4	55.80	8.35%
1966	792.8	68.40	9.44%
1967	837.8	45.00	5.68%
1968	915.9	78.10	9.32%
1969	990.5	74.60	8.14%
1970	1,044.70	54.20	5.47%
1971	1,134.40	89.70	8.59%
1972	1,246.40	112.00	9.87%
1973	1,394.90	148.50	11.91%
1974	1,515.00	120.10	8.61%
1975	1,650.70	135.70	8.96%
1976	1,841.40	190.70	11.55%
1977	2,050.40	209.00	11.35%

**DUKE ENERGY OHIO, INC.**  
**CASE NO. 12-1685-GA-AIR**  
**Growth in U. S. Gross National Product, 1929-2011**

**SCHEDULE D-1.10**  
**PAGE 2 OF 2**

<b>Year</b>	<b>GNP (\$billion)</b>	<b>Change (\$billion)</b>	<b>Growth%</b>
1978	2,315.30	264.90	12.92%
1979	2,594.20	278.90	12.05%
1980	2,822.30	228.10	8.79%
1981	3,159.80	337.50	11.96%
1982	3,289.70	129.90	4.11%
1983	3,571.70	282.00	8.57%
1984	3,967.20	395.50	11.07%
1985	4,244.00	276.80	6.98%
1986	4,477.70	233.70	5.51%
1987	4,754.00	276.30	6.17%
1988	5,123.80	369.80	7.78%
1989	5,508.10	384.30	7.50%
1990	5,835.00	326.90	5.93%
1991	6,022.00	187.00	3.20%
1992	6,371.40	349.40	5.80%
1993	6,698.50	327.10	5.13%
1994	7,109.20	410.70	6.13%
1995	7,444.30	335.10	4.71%
1996	7,870.10	425.80	5.72%
1997	8,355.80	485.70	6.17%
1998	8,810.80	455.00	5.45%
1999	9,381.30	570.50	6.48%
2000	9,989.20	607.90	6.48%
2001	10,338.10	348.90	3.49%
2002	10,691.40	353.30	3.42%
2003	11,210.90	519.50	4.86%
2004	11,944.50	733.60	6.54%
2005	12,720.10	775.60	6.49%
2006	13,449.60	729.50	5.74%
2007	14,151.90	702.30	5.22%
2008	14,460.70	308.80	2.18%
2009	14,117.20	-343.50	-2.38%
2010	14,708.20	591.00	4.19%
2011	15,327.50	619.30	4.21%
<b>Average</b>			<b>6.52%</b>

Sources: ( 1 ) National Income and Product Accounts ( NIPA ) from the U. S. Bureau of Economic Analysis and Econostats; BEA Data; NIPA Index; Section 1. Domestic Product and Income Table 1.7.5 Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income. ( 2 ) U. S. Department of Commerce; Survey of Current of the United States Business and Historical Statistics

DUKE ENERGY OHIO  
CASE NO. 12-1685-GA-AIR  
TYPICAL BILL COMPARISON

LINE NO.	RATE CODE	LEVEL of DEMAND (A)	LEVEL of USE (B)	BILL DATA INCL ALL RIDERS' LESS COST OF GAS (1)										TOTAL CURRENT BILL (C+G) (H)	TOTAL PROPOSED BILL (D+G) (I)	PERCENT INCREASE (I-H) (J)
				CURRENT BILL & XTAX (C)	PROPOSED BILL & XTAX (D)	INCREASE (D-C) (E)	PERCENT INCREASE (E/C) (F)	GAS COST (G)	XTAX (G)	INCREASE (G-G)	PERCENT INCREASE (G-G)	INCREASE (I-H) (J)	INCREASE (I-H) (J)			
1	(RS)	Not	1	35.18	36.19	1.01	2.9	6.20				41.38	42.39	2.4		
2		Applicable	3	36.23	39.30	3.07	8.5	18.60				54.83	57.90	5.6		
3			6	37.81	43.96	6.15	16.3	37.21				75.02	81.17	8.2		
4			8	38.86	47.06	8.20	21.1	49.61				88.47	96.67	9.3		
5			10	39.91	50.17	10.26	25.7	62.01				101.92	112.18	10.1		
6			12	40.96	53.27	12.31	30.1	74.41				115.37	127.68	10.7		
7			16	43.08	59.48	16.40	38.1	99.22				142.30	158.70	11.5		
8			20	45.18	65.69	20.51	45.4	124.02				169.20	189.71	12.1		
9			30	50.44	81.19	30.75	61.0	186.03				236.47	267.22	13.0		
10			40	55.69	96.70	41.01	73.6	248.04				303.73	344.74	13.5		
11			50	67.74	139.35	71.61	105.7	310.05				377.79	449.40	19.0		
12			60	79.76	181.99	102.23	128.2	372.07				451.83	554.06	22.6		
13			80	103.81	267.26	163.45	157.5	496.09				599.90	763.35	27.2		
14			100	127.87	352.54	224.67	175.7	620.11				747.98	972.65	30.0		
15	(RFT)		1	35.18	36.19	1.01	2.9	(0.01)				35.17	36.18	2.9		
16	RESIDENTIAL FIRM		3	36.20	39.27	3.07	8.5	(0.04)				36.16	39.23	8.5		
17	TRANSPORTATION		6	37.76	43.91	6.15	16.3	(0.08)				37.68	43.83	16.3		
18			8	38.78	46.98	8.20	21.1	(0.10)				38.68	46.88	21.2		
19			10	39.81	50.07	10.26	25.8	(0.13)				39.68	49.94	25.9		
20			12	40.85	53.16	12.31	30.1	(0.16)				40.69	53.00	30.3		
21			16	42.93	59.33	16.40	38.2	(0.21)				42.72	59.12	38.4		
22			20	44.99	65.50	20.51	45.6	(0.26)				44.73	65.24	45.9		
23			30	50.15	80.90	30.75	61.3	(0.39)				49.76	80.51	61.8		
24			40	55.31	96.32	41.01	74.1	(0.52)				54.79	95.80	74.8		
25			50	67.26	138.87	71.61	106.5	(0.65)				66.61	138.22	107.5		
26			60	79.20	181.43	102.23	129.1	(0.79)				78.41	180.64	130.4		
27			80	103.06	266.51	163.45	158.6	(1.05)				102.01	265.46	160.2		
28			100	126.93	351.60	224.67	177.0	(1.31)				125.62	350.29	178.8		

- (1) INCLUDES RIDERS AMRP AU, UE-G, CCCR AND PIPP PLUS EXCISE TAX.  
(2) EXPECTED GAS COST RATE EQUALS \$5.912/MCF.  
(3) GAS SURCREDIT RIDER RATE EQUALS -\$0.012479/MCF FOR RATE RFT.

DUKE ENERGY OHIO  
CASE NO. 12-1685-GA-AIR  
TYPICAL BILL COMPARISON

LINE NO.	RATE CODE	LEVEL OF DEMAND (A)	LEVEL OF USE (B)	BILL DATA INCLUDING RIDERS LESS COST OF GAS (1)										TOTAL CURRENT BILL (C+G) (H)	TOTAL PROPOSED BILL (D+G) (I)	PERCENT INCREASE (I-H) (J)
				CURRENT BILL (C)	PROPOSED BILL (D)	DIFFERENCE (D-C) (E)	PERCENT INCREASE (E/C) (F)	GAS COST (2) (G)	SALES TAX (H)	PROPERTY TAX (I)	WATER & SEWER (J)	WASTE (K)	OTHER (L)			
1	(GS-S)	Not	5	102.25	105.13	2.88	2.8	31.01						133.26	136.14	2.2
2	NON-RESIDENTIAL	Applicable	10	108.38	114.14	5.76	5.3	62.01						170.39	176.15	3.4
3			20	120.64	132.16	11.52	9.5	124.02						244.66	256.18	4.7
4			30	132.90	150.18	17.28	13.0	186.03						318.93	336.21	5.4
5			40	145.16	168.20	23.04	15.9	248.04						393.20	416.24	5.9
6			50	157.42	186.22	28.80	18.3	310.05						467.47	496.27	6.2
7			60	169.68	204.24	34.56	20.4	372.07						541.75	576.31	6.4
8			75	188.06	231.27	43.21	23.0	465.08						653.14	696.35	6.6
9			80	194.19	240.28	46.09	23.7	496.09						690.28	736.37	6.7
10			100	218.71	276.32	57.61	26.3	620.11						838.82	896.43	6.9
11			200	333.79	449.01	115.22	34.5	1,240.22						1,574.01	1,689.23	7.3
12			300	448.87	621.70	172.83	38.5	1,860.33						2,309.20	2,482.03	7.5
13			400	563.95	794.39	230.44	40.9	2,480.44						3,044.39	3,274.83	7.6
14	(GS-L)		50	301.84	320.17	18.33	6.1	310.05						611.89	630.22	3.0
15	NON-RESIDENTIAL		100	365.95	402.62	36.67	10.0	620.11						986.06	1,022.73	3.7
16			200	422.56	477.56	55.00	13.0	1,240.22						1,662.78	1,717.78	3.3
17			400	728.12	874.78	146.66	20.1	2,480.44						3,208.56	3,355.22	4.6
18			450	788.48	953.47	164.99	20.9	2,790.49						3,578.97	3,743.96	4.6
19			500	848.84	1,032.16	183.32	21.6	3,100.55						3,949.39	4,132.71	4.6
20			700	1,090.28	1,346.93	256.65	23.5	4,340.77						5,431.05	5,687.70	4.7
21			850	1,271.36	1,583.01	311.65	24.5	5,270.93						6,542.29	6,853.94	4.8
22			1,000	1,452.44	1,819.09	366.65	25.2	6,201.10						7,653.54	8,020.19	4.8
23			2,000	2,659.66	3,392.94	733.28	27.6	12,402.19						15,061.85	15,795.13	4.9
24			3,000	3,818.00	4,917.91	1,099.91	28.8	18,603.29						22,421.29	23,521.20	4.9
25			4,000	4,976.34	6,442.88	1,466.54	29.5	24,804.39						29,780.73	31,247.27	4.9
26			5,000	6,134.68	7,967.85	1,833.17	29.9	31,005.48						37,140.16	38,973.33	4.9
27			6,000	7,293.02	9,492.82	2,199.80	30.2	37,206.58						44,499.60	46,699.40	4.9
28			7,000	8,451.36	11,017.79	2,566.43	30.4	43,407.68						51,859.04	54,425.47	4.9
29			8,000	9,609.70	12,542.76	2,933.06	30.5	49,608.77						59,218.47	62,151.53	5.0

(1) INCLUDES RIDERS AMPP AU, UE-G, CCCR AND PIPP PLUS EXCISE TAX.

(2) EXPECTED GAS COST RATE EQUALS \$5.912/MCF.

DUKE ENERGY OHIO  
CASE NO. 12-1685-GA-AIR  
TYPICAL BILL COMPARISON

LINE NO.	RATE CODE	LEVEL of DEMAND (A)	LEVEL of USE (B)	BILL DATA INCL. ALL RIDERS LESS COST OF GAS (1)				TOTAL			
				CURRENT BILL (C)	PROPOSED BILL (D)	DOLLAR INCREASE (D - C) (E)	PERCENT INCREASE (E / C) (F)	GAS COST (2) & XTAX (G)	CURRENT BILL (C + G) (H)	PROPOSED BILL (D + G) (I)	PERCENT INCREASE (I - H) / H (J)
			(MCF)	(\$)	(\$)	(\$)	(%)	(\$)	(\$)	(\$)	(%)
1	(FT-S)	Not	5	102.20	105.08	2.88	2.8	(0.07)	102.13	105.01	2.8
2	NON-RESIDENTIAL	Applicable	10	108.29	114.05	5.76	5.3	(0.13)	108.16	113.92	5.3
3	FIRM TRANSPORTATION		20	120.45	131.97	11.52	9.6	(0.26)	120.19	131.71	9.6
4	SMALL		30	132.62	149.90	17.28	13.0	(0.39)	132.23	149.51	13.1
5			40	144.78	167.82	23.04	15.9	(0.52)	144.26	167.30	16.0
6			50	156.94	185.75	28.81	18.4	(0.65)	156.29	185.10	18.4
7			60	169.11	203.67	34.56	20.4	(0.79)	168.32	202.88	20.5
8			75	187.36	230.56	43.20	23.1	(0.98)	186.38	229.58	23.2
9			80	193.44	239.52	46.08	23.8	(1.05)	192.39	238.47	24.0
10			100	217.77	275.37	57.60	26.4	(1.31)	216.46	274.06	26.6
11			200	331.91	447.11	115.20	34.7	(2.62)	329.29	444.49	35.0
12			300	446.05	618.85	172.80	38.7	(3.93)	442.12	614.92	39.1
13			400	560.19	790.59	230.40	41.1	(5.24)	554.95	785.35	41.5
14	(FT-L)		50	301.37	319.70	18.33	6.1	(0.65)	300.72	319.06	6.1
15	NON-RESIDENTIAL		100	365.01	401.67	36.66	10.0	(1.31)	363.70	400.36	10.1
16	FIRM TRANSPORTATION		200	421.15	476.14	54.99	13.1	(2.62)	418.53	473.52	13.1
17	LARGE		400	724.34	870.99	146.65	20.2	(5.24)	719.10	865.75	20.4
18			450	784.23	949.21	164.98	21.0	(5.89)	778.34	943.32	21.2
19			500	844.12	1,027.43	183.31	21.7	(6.54)	837.58	1,020.89	21.9
20			700	1,083.68	1,340.31	256.63	23.7	(9.16)	1,074.52	1,331.15	23.9
21			850	1,263.35	1,574.97	311.62	24.7	(11.13)	1,252.22	1,563.84	24.9
22			1,000	1,443.02	1,809.63	366.61	25.4	(13.09)	1,429.93	1,796.54	25.6
23			2,000	2,640.80	3,374.04	733.24	27.8	(26.18)	2,614.62	3,347.86	28.0
24			3,000	3,789.70	4,889.57	1,099.87	29.0	(39.27)	3,750.43	4,850.30	29.3
25			4,000	4,938.60	6,405.10	1,466.50	29.7	(52.36)	4,886.24	6,352.74	30.0
26			5,000	6,087.50	7,920.63	1,833.13	30.1	(65.45)	6,022.05	7,855.18	30.4
27			6,000	7,236.40	9,436.16	2,199.76	30.4	(78.54)	7,157.66	9,357.62	30.7
28			7,000	8,385.30	10,951.69	2,566.39	30.6	(91.62)	8,293.68	10,860.07	30.9
29			8,000	9,534.20	12,467.22	2,933.02	30.8	(104.71)	9,429.49	12,362.51	31.1

(1) INCLUDES RIDERS AMRP, AU, UE-G, CCCR, STR, AND PIPP PLUS EXCISE TAX.

(2) GAS SURCREDIT RIDER RATE EQUALS \$0.012479/MCF FOR RATE FT-S AND FT-L.



DUKE ENERGY OHIO  
CASE NO. 12-1685-GA-AIR  
TYPICAL BILL COMPARISON

LINE NO.	RATE CODE	LEVEL of DEMAND (A)	LEVEL of USE (B)	BILL DATA NET ALL RIDERS LESS COST OF GAS (1)					TOTAL				
				CURRENT BILL (C)	PROPOSED BILL (D)	DOLLAR INCREASE (E)	PERCENT INCREASE (E/C)	GAS COST (2) & XTAX (G)	CURRENT BILL (C+G)	PROPOSED BILL (D+G)	PERCENT INCREASE (H+I)/H		
			(MCF)	(\$)	(\$)	(\$)	(%)	(\$)	(\$)	(\$)	(%)	(\$)	(%)
1	(IT)	Not	25,000	20,084.54	22,806.38	2,721.84	13.6		20,084.54	22,806.38	13.6		
2	INTERRUPTIBLE	Applicable	50,000	39,436.74	44,880.43	5,443.69	13.8		39,436.74	44,880.43	13.8		
3	TRANSPORTATION		100,000	78,141.15	89,028.52	10,887.37	13.9		78,141.15	89,028.52	13.9		
4			200,000	155,549.97	177,324.72	21,774.75	14.0		155,549.97	177,324.72	14.0		
5			300,000	232,958.79	265,620.91	32,662.12	14.0		232,958.79	265,620.91	14.0		
6			400,000	310,367.61	353,917.10	43,549.49	14.0		310,367.61	353,917.10	14.0		
7			500,000	387,776.43	442,213.29	54,436.86	14.0		387,776.43	442,213.29	14.0		
8			800,000	620,002.89	707,101.87	87,098.98	14.0		620,002.89	707,101.87	14.0		
9			1,000,000	774,820.53	883,694.25	108,873.72	14.1		774,820.53	883,694.25	14.1		
10			1,200,000	929,638.17	1,060,286.64	130,648.47	14.1		929,638.17	1,060,286.64	14.1		
11			1,500,000	1,161,864.63	1,325,175.21	163,310.58	14.1		1,161,864.63	1,325,175.21	14.1		
12			1,800,000	1,394,091.09	1,590,063.79	195,972.70	14.1		1,394,091.09	1,590,063.79	14.1		
13			2,000,000	1,548,908.73	1,766,656.18	217,747.45	14.1		1,548,908.73	1,766,656.18	14.1		
14			2,500,000	1,935,952.83	2,208,137.14	272,184.31	14.1		1,935,952.83	2,208,137.14	14.1		

(1) INCLUDES RIDERS AMRP, AU, STR PLUS EXCISE TAX.

(2) EXPECTED GAS COST RATE EQUALS \$5.912/MCF.