50

The Cleveland Electric Illuminating Company
Ohio Edison Company
The Toledo Edison Company
and
American Transmission Systems, Incorporated

2009-ELECTRIC

LONG-TERM FORECAST REPORT

TO THE

PUBLIC UTILITIES COMMISSION OF OHIO

CASE NO. 09-504-EL-FOR

CERTIFICATE OF SERVICE

I hereby certify that this 2009 Long-Term Forecast Report was filed by The Cleveland Electric Illuminating Company, Ohio Edison Company, The Toledo Edison Company and American Transmission Systems, Inc. with the Public Utilities Commission of Ohio on April 15, 2009 and that:

1. Pursuant to Rule 4901:5-1-03(F), Ohio Administrative Code, a copy of the 2009 Long-Term Forecast Report has been delivered or mailed on the day of filing to the Office of the Ohio Consumers' Counsel;

2. Pursuant to Rule 4901:5-1-03(G), Ohio Administrative Code, within three days of filing with the Public Utilities Commission of Ohio, a letter stating that the Long-Term Forecast Report has been filed with the Public Utilities Commission of Ohio and that a copy of the Long-Term Forecast report is available for public inspection at the Public Utilities Commission offices located at 180 East Broad Street, Columbus, Ohio, will be sent by first class mail to the appropriate county libraries

3. Pursuant to Rule 4901:5-1-03(H), Ohio Administrative Code, the FirstEnergy Companies will keep at least one copy of its 2009 Long-Term Forecast Report at its principal business office for public inspection during business hours; and

4. Pursuant to Rule 4901:5-1-03(I), Ohio Administrative Code, the FirstEnergy Companies will provide a copy of its 2009 Long-Term Forecast Report to any person upon request at a cost to cover the expenses incurred.

David M. Blank
Vice President, Rates and Regulatory Affairs
FirstEnergy Corp.
76 South Main Street
Akron, OH 44308-1890
(330) 384-5451

ATTESTATION

This Long-Term Forecast Report filed by Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company and American Transmission Systems, Incorporated is true and correct to the best of my knowledge and belief.

David M. Blank
Vice President, Rates and Regulatory Affairs
FirstEnergy Corp.

FirstEnergy Companies
Long-Term Forecast Report
2009

Table of Contents

CHAPTER 1

GENERAL REMARKS

GENERAL REMARKS

The following Long-Term Forecast Report is submitted in accordance with the requirements of the Ohio Revised Code, Chapter 4935. Section 4935.04 (C) of that Chapter provides in part:

> "Each person owning or operating a major utility facility within this state, or furnishing gas, natural gas, or electricity directly to more than fifteen thousand customers within this state annually shall furnish a report to the Commission for its review."

This Long-Term Forecast Report (LTFR) is submitted by American Transmission System, Incorporated (ATSI), The Cleveland Electric Illuminating Company (CEI), Ohio Edison Company (OEC), and Toledo Edison Company (TE), all of which are Ohio corporations (hereinafter referred to as "Applicants", or "FirstEnergy Companies"). CEI, OEC, and TE are hereinafter referred to as "FirstEnergy Operating Companies". Pennsylvania Power Company (PP) is a wholly-owned subsidiary of Ohio Edison Company and a Pennsylvania corporation. PP's energy and load forecasts are combined with the energy and load forecasts of the FirstEnergy Operating Companies to arrive at a system total ("FirstEnergy System"). The electric systems of the FirstEnergy System are interconnected and fully integrated, and for planning and operating purposes are treated as a single electric system. ATSI, a wholly-owned subsidiary of FirstEnergy Corp., owns and operates the transmission assets, including the system control center. Separate data are presented for the Applicants where required or where deemed appropriate because of the nature of the requirement to which a response is made.

The information on "existing substation and transmission facilities" reflects information regarding facilities that were in service prior to or on December 31, of the preceding year. The peak load forecasts were developed in November 2008 and are based on the most recently available data from January 2002 through October 2008. The energy forecasts were developed in March 2009 and are based on the most recently available data from January 2002 through February 2009.

A letter stating that a copy of this report is available for public inspection at the Commission's Offices

located at 180 East Broad Street, Columbus, Ohio is being mailed to all public libraries listed on Exhibit A. This Exhibit lists the designated libraries for each Ohio county in the FirstEnergy Operating Companies' service area. Pursuant to Rule 4901:5-1-03(F) a copy of this report is also being provided to the Ohio Consumers' Counsel.

SPECIAL TOPIC QUESTIONS

The Commission did not request responses to any Special Topics in the area of Transmission and Distribution. Therefore no Special Topics are addressed in the LTFR for 2009.

Ashland County
Ashland University Library
509 College Avenue
Ashland, OH 44805

Ashtabula County
Ashtabula County District Library
335 W. 44th Street
Ashtabula, OH 44004

Carroll County
Carroll County District Library
70 Second St NE
Carrollton, OH 44615

Champaign County
Champaign County Library
1060 Scioto Street
Urbana, OH 45502

Clark County
Clark County Public Library
201 S. Fountain Avenue – PO Box 1080
Springfield, OH 45502-1080

Columbiana County
Carnegie Public Library
219 E. Fourth Street
East Liverpool, OH 43920

Lepper Library
303 E. Lincoln Way
Lisbon, OH 44432

Crawford County
Bucyrus Public Library
200 E. Mansfield
Bucyrus, OH 44820

Cuyahoga County
Cleveland Public Library
Reference Division
325 Superior Avenue, N.E.
Cleveland, OH 44114

Cuyahoga County Public Library
Maple Heights Regional
5225 Library Lane
Maple Heights, OH 44137

Defiance County
Defiance Public Library
320 Fort Street
Defiance, OH 43512

Delaware County
Delaware County District Library
84 E. Winter Street
Delaware, OH 43015

Erie County
Sandusky Library
114 W. Adams Street
Sandusky, OH 44870

Huron Public Library
333 Williams Street
Huron, OH 44839

Fayette County
Carnegie Public Library
127 S. North Street
Washington C.H., OH 43160

Franklin County
Columbus Metropolitan Library
Attn: N. Friday, Biography,
History & Travel Division
96 S. Grant Avenue
Columbus, OH 43215-478

Fulton County
Delta Public Library
402 Main Street
Delta, OH 43515

Geauga County
Geauga County Public Library
12701 Ravenwood Drive
Chardon, OH 44024

Greene County
Hallie Q. Brown Memorial Library
Central State University
1400 Brush Row Road, Box # 1006
Wilberforce, OH 45384

Greene County District Library
76 East Market Street, POB 520
Xenia, OH 45385

Hardin County
Mary Lou Johnson Hardin County
District Library
325 E. Columbus Street
Kenton, OH 44326

Henry County
Napoleon Public Library
310 W. Clinton Street
Napoleon, OH 43545

Huron County
Willard Memorial Library
6 W. Emerald Street
Willard, OH 44890

Knox County
Mt. Vernon Public Library
201 N. Mulberry Street
Mt. Vernon, OH 43050

Lake County
Morley Library
184 Phelps Street
Painesville, OH 44077

Licking County
Licking County Library
101 W. Main Street
Newark, OH 43055

Lorain County
Lorain Public Library
351 Sixth Street
Lorain, OH 44052

Oberlin College Library
Reference Division
148 W. College Street
Oberlin, OH 44074-1532

Elyria Public Library
320 Washington Avenue
Elyria, OH 44035

Lucas County
Toledo-Lucas County Public Library
Reference Division
325 Michigan Street
Toledo, OH 43604

William S. Carlson Library
University of Toledo
Reference Division
2801 West Bancroft Street
Toledo, OH 43606-3399

Madison County
London Public Library
20 E. First Street
London, OH 43140

West Jefferson Public Library
270 Lilly Chapel Road
West Jefferson, OH 43162

Mahoning County
Public Library of Youngstown
Reference Division
305 Wick Avenue
Youngstown, OH 44503

Marion County
Marion Public Library
445 E. Church Street
Marion, OH 43302

Medina County
Medina County District Library
210 S. Broadway
Medina, OH 44256

Morrow County
Mt. Gilead Free Public Library
35 E. High Street
Mt. Gilead, OH 43338

Ottawa County
Ida Rupp Public Library
310 Madison Street
Port Clinton, OH 43452

Portage County
Portage County District Library
10482 South Street
Garrettsville, OH 44231

Kent State University Library
Serials Department
1 Eastway Drive, P.O. Box 5190
Kent, OH 44242-0001

Putnam County
Putnam County District Library
124 Putnam Parkway
Educational Service Center
Ottawa, OH 45875-0308

Richland County
Mansfield Public Library
43 W. Third Street
Mansfield, OH 44902

Sandusky County
Birchard Public Library
423 Croghan Street
Fremont, OH 43420

Seneca County
Tiffin-Seneca Public Library
77 Jefferson Street
Tiffin, OH 44883

Stark County
Stark County District Library
715 Market Ave., N.
Canton, OH 44702

Summit County
Akron-Summit County Public Library
60 South High Street
Akron, OH 44326

Trumbull County
Warren-Trumbull County Public Library
444 Mahoning Avenue, N.W.
Warren, OH 44483

Tuscarawas County
Tuscarawas County Public Library
121 Fair Avenue, N.W.
New Philadelphia, OH 44663

Union County
Marysville Public Library
231 S. Plum Street
Marysville, OH 43040

Wayne County
Wayne County Public Library
304 N. Market Street
Wooster, OH 44691

Williams County
Williams County Public Library
107 E. High Street
Bryan, OH 43506

Wood County
Wood County District Public Library
251 N. Main Street
Bowling Green, OH 43402

William T. Jerome Library
Bowling Green State University
Documents Librarian
Bowling Green, OH 43403

Wyandot County
Upper Sandusky Community Library
301 N. Sandusky Avenue
Upper Sandusky, OH 43351

CHAPTER 2

GENERAL GUIDELINES

SECTION	TOPIC AND FORMS UTILIZED
2(A)	DEFINITIONS
2(B)	SUMMARY OF LONG-TERM FORECAST REPORT
	1. Planning Objectives
	2. Energy and Load Forecast Summary
	3. Load Forecasting Process
2(C)	SPECIAL TOPICS RESPONSES
2(D)	FORECAST DOCUMENTATION

GENERAL GUIDELINES

(A) DEFINITIONS

The terminology used in this chapter and throughout this report conforms to the definitions in Rules 4901:5-1-01 and 4901:5-5-01.

(B) SUMMARY OF THE LONG-TERM FORECAST REPORT

(1) Planning Objectives

The planning objective of the Long-Term Forecast Report is to present an estimate of future load and energy consumption by the FirstEnergy Operating Companies' service area customers, taking into account local and national business conditions, as well as historical usage patterns.

2)Energy and Load Forecast Summary

This Long-Term Forecast Report has been submitted by the FirstEnergy Companies in accordance with the Ohio Revised Code, Chapter 4935.

The distribution forecast is the simple summation of the distribution forecasts for Ohio Edison Company (OE), The Cleveland Electric Illuminating Company (CEI), The Toledo Edison Company (TE) and Pennsylvania Power Company (PP). The 2009 Forecast of Energy and Peak Demands projects that total energy for the FirstEnergy System will reach 65,771 GWH by 2013 and 64,771 GWH by 2019, resulting in an effective growth rate of 0.72%. This compares to an average annual rate of 0.98% in the 2008 Forecast. The attached tables identify total energy for the FirstEnergy System to be 67,545 GWH by 2013 and 70,424 GWH by 2019. These GWH values are then reduced by the statutory energy efficiency values set forth in Amended Substitute Senate Bill Number 221. Annual internal peak demand for the FirstEnergy System, taking into account future peak demand reduction values set forth in Amended Substitute Senate Bill Number 221, is expected to grow at an average annual rate of 0.91% in the 2009 Forecast, compared to 1.31% in the previous forecast.

(3)Load Forecasting Process

The forecasting for the transmission system is covered in Chapter 3. The forecasting for the distribution system is detailed in Chapter 4.

(C) **SPECIAL TOPICS AREA**

The Commission did not identify any Special Topics in the area of Transmission and Distribution to be addressed in the LTFR for 2009.

(D) **FORECAST DOCUMENTATION**

The forecast is to include a description of the forecast methodology that includes a description of the forecast methodology used, assumptions and database documentation. This information is detailed in the Chapter 3 for the transmission system and Chapter 4 for the distribution system.

CHAPTER 3
ELECTRIC TRANSMISSION FORECAST

SECTION	TOPIC AND FORMS UTILIZED
3(A)	GENERAL
3(B)	TRANSMISSION ENERGY DATA AND PEAK DEMAND FORECAST FORMS
3(C)	THE EXISTING TRANSMISSION SYSTEM
3(D)	THE PLANNED TRANSMISSION SYSTEM
3(E)	RELIABILITYFIRST CORP AND BULK POWER REQUIREMENTS
3(F)	TRANSMISSION FORECAST FORMS

FE3-T1	Transmission Energy Delivery Forecast
FE3-T2	Electric Transmission Owner's System Seasonal Peak Load Demand Forecast (MW)
FE3-T3	Electric Transmission Owner's Total Monthly Energy Forecast (MWH)
FE3-T4	Electric Transmission Owner's Monthly Internal Peak Load Forecast (MW)
FE3-T5	Monthly Energy Transactions (Total MWH/month) for the most recent years Part A: Sources of Energy Part B: Delivery of Energy Part C: Losses and Unaccounted for MWH
FE3-T6	Conditions at Time of Monthly Peak
FE3-T7	Characteristics of Transmission Owner's Existing Transmission Lines
FE3-T8	Summary of Existing Substations on Transmission Lines
FE3-T9	Specifications of Planned Electric Transmission Lines
FE3-T10	Summary of Proposed Substations

3(G) MAPS:

Map 1	System Schematic – Cleveland Electric Illuminating Company
Map 2A	System Schematic – Ohio Edison Company (Central, Southern, Western)
Map 2B	System Schematic – Ohio Edison Company (Central, Eastern)
Map 3	System Schematic - Toledo Edison Company
Map 4	System Geographic – FirstEnergy System

CONFIDENTIAL HIGHLY SENSITIVE -CEII

CHAPTER 4
FORECAST FOR ELECTRIC DISTRIBUTION

SECTION	TOPIC AND FORMS UTILIZED
4(A)	SUMMARY OF LONG-TERM DISTRIBUTION FORECAST
4(B)	*GENERAL GUIDELINES*
4(C)	FORECAST DOCUMENTATION
4(D)	DISTRIBUTION DEMAND FORECAST FORMS
4(E)	SUBSTANTIATION OF THE PLANNED DISTRIBUTION SYSTEM
4(F)	DISTRIBUTION SWITCHING DIAGRAMS (FILED UNDER SEAL)

(A) SUMMARY OF THE LONG-TERM DISTRIBUTION FORECAST

(1) Planning Objectives

The FirstEnergy Companies are in business to meet the present and future energy needs of their customers. In pursuit of this mission, the FirstEnergy Companies' distribution planning processes are guided by the following general objectives:

- Supporting a vital economy within the FirstEnergy Companies' service territory.
- Preserving sufficient flexibility in the FirstEnergy Companies distribution plans so as to enable the FirstEnergy Companies to pursue alternative courses of action as future circumstances warrant.
- Earning competitive cash returns on funds invested in distribution options.
- Meeting the FirstEnergy Companies' transmission and reliability goals.
- Meeting the FirstEnergy Companies' energy efficiency requirements.
- Maintaining the FirstEnergy Companies' focus on safety.

(2) Energy and Load Forecast Summary

Forecasts were independently prepared for the FirstEnergy Operating Companies. Long-term models were re-estimated for all classes of the customers. The long-term results from those same class models were reviewed and determined to be appropriate for the long-term forecast.

The forecast is the summation of the forecasts for the various classes. The FirstEnergy Operating Companies' distribution forecast is the summation of these energy forecasts. The FirstEnergy System's load forecast combines the load forecasts for the FirstEnergy Operating Companies[1] using the appropriate diversity factors.

[1] This total also includes the load forecast from Pennsylvania Power Corporation (PP), a wholly owned subsidiary of Ohio Edison, and a Pennsylvania Company.

System Forecast

Adding the corresponding energy forecasts for Ohio Edison, Pennsylvania Power, Toledo Edison and CEI produces the FirstEnergy System energy forecast. However, the annual system peak demand cannot generally be computed by adding the four companies' peaks, because this would ignore the effects of diversity (or difference in the time of occurrence) between the peak demands of the individual companies. The correct equation for combining the individual company diversified peak demands into an overall FirstEnergy System diversified demand is:

$$FES = (OEC+PP + CEI + TE) * D$$

where FES is the monthly FirstEnergy System peak demand including firm off-system load, OEC is the monthly internal Ohio Edison peak demand, PP is the monthly internal Pennsylvania Power Company peak demand, CEI is the monthly internal Cleveland Electric Illuminating peak, TE is the monthly internal Toledo Edison peak, and D is a diversity factor needed to obtain the peak for the FirstEnergy System. For this forecast, the diversity factor D varies by month. The diversity factor is .984 for summer peaks, .992 for winter peaks, and .985 for an average of all months throughout the forecast period.

The annual load factors produced as a result of these forecasts are shown in the following table.

Annual Distribution Load Factors

Year	Ohio Edison	CEI	Toledo Edison	FirstEnergy System*
2004	63.7%	61.9%	66.9%	64.1%
2005	59.4%	58.9%	64.7%	60.1%
2006	57.3%	54.2%	60.2%	57.6%
2007	59.1%	58.0%	64.3%	60.4%
2008	61.1%	59.1%	65.3%	61.0%
2009	55.8%	54.6%	58.0%	56.8%
2010	56.3%	54.5%	59.2%	57.6%
2011	58.6%	55.1%	62.1%	59.3%
2012	59.5%	55.4%	63.3%	60.0%
2013	59.7%	55.1%	63.7%	60.1%
2014	59.7%	54.6%	63.6%	59.9%
2015	59.7%	54.2%	63.5%	59.7%
2016	59.6%	53.6%	63.2%	59.4%
2017	59.9%	53.4%	63.2%	59.4%
2018	59.9%	53.0%	63.1%	59.3%
2019	60.0%	52.6%	60.9%	59.1%

Notes: These load factors are calculated from total distribution energy from Forms FE4-D1 and FE4-D2 and annual internal peaks from Forms FE4-D4 and FE4-D5. Historical load factors tend to be higher than forecast load factors due to company-initiated curtailments of customers served under curtailable contracts that lower historical peaks.

* Includes Pennsylvania Power.

(B) GENERAL GUIDELINES

This portion of the Long-Term Forecast is submitted to satisfy the requirements of Rule 4901:5-5-04. Rule 4901:5-5-04(A) specifies guidelines to be used to produce the EDU's monthly forecasts of energy and peak load in the Electric Distribution Forecast. These guidelines have been observed in the preparation of Chapter 4 of this Report. Rule 4901:5-5-02(C) requires that special subject areas be covered. Chapter 4(C) of this report supplies the necessary forecast documentation.

The necessity of reporting data in the manner set forth in the administrative rules means that energy and load data contained in this report may be different from data reported by the FirstEnergy System in other filings and for other purposes. For example, the FirstEnergy System normally includes Rural Electric Cooperative (REC) sales and loads in reported total sales and peak demands. However, for this report, all REC sales and loads have been excluded from the FirstEnergy System's distribution data. Additionally, the FirstEnergy System provides wholesale service to municipal customers located within its service territories. For the historical period and projected period, energy and the associated peak load delivered to municipal customers have been excluded from the distribution data contained in this report for the individual FirstEnergy System. However, energy and peak loads associated with REC municipal resale are included within the transmission data reported within this document.

(C) FORECAST DOCUMENTATION

Overview

The energy forecasts were independently prepared for the FirstEnergy Operating Companies. Development of the electric sales forecast for each Company utilizes econometric models to best capture recent trends in actual electric consumption for each customer class. Monthly electric sales and economic variables are used in the forecasting models and in the overall analyses of trends. Focus is placed on electric sales for the most recent years in order to recognize impacts due to changes in customer usage including large customers and movement in the economy.

While the relationship between price and energy consumption was considered, models analyzed in the forecast method have indicated that historical prices are not a significant driver for retail energy demand in the FirstEnergy Operating Companies' regions. Therefore, price was not explicitly used as an independent variable in this year's forecast models due to this lack of correlation. The FirstEnergy Operating Companies will continue to use econometric models to consider the relationship between price and energy consumption for future retail energy forecasts.

The energy (sales) forecasts were developed by evaluating the fits of econometric regressions. These forecasting tools are part of a forecasting software package called "MetrixND" (discussed below in the "Residential" section). This method uses information about economic activity in the service area. More specifically, economic information was gathered at the county level for those counties which are in the service area, and then aggregated. Models were updated, rerun and evaluated for all customer classes of the FirstEnergy Operating Companies. Information regarding economic conditions comes from a variety of sources, which include the following:

- Economic consulting firms
- Moody's Economy.com

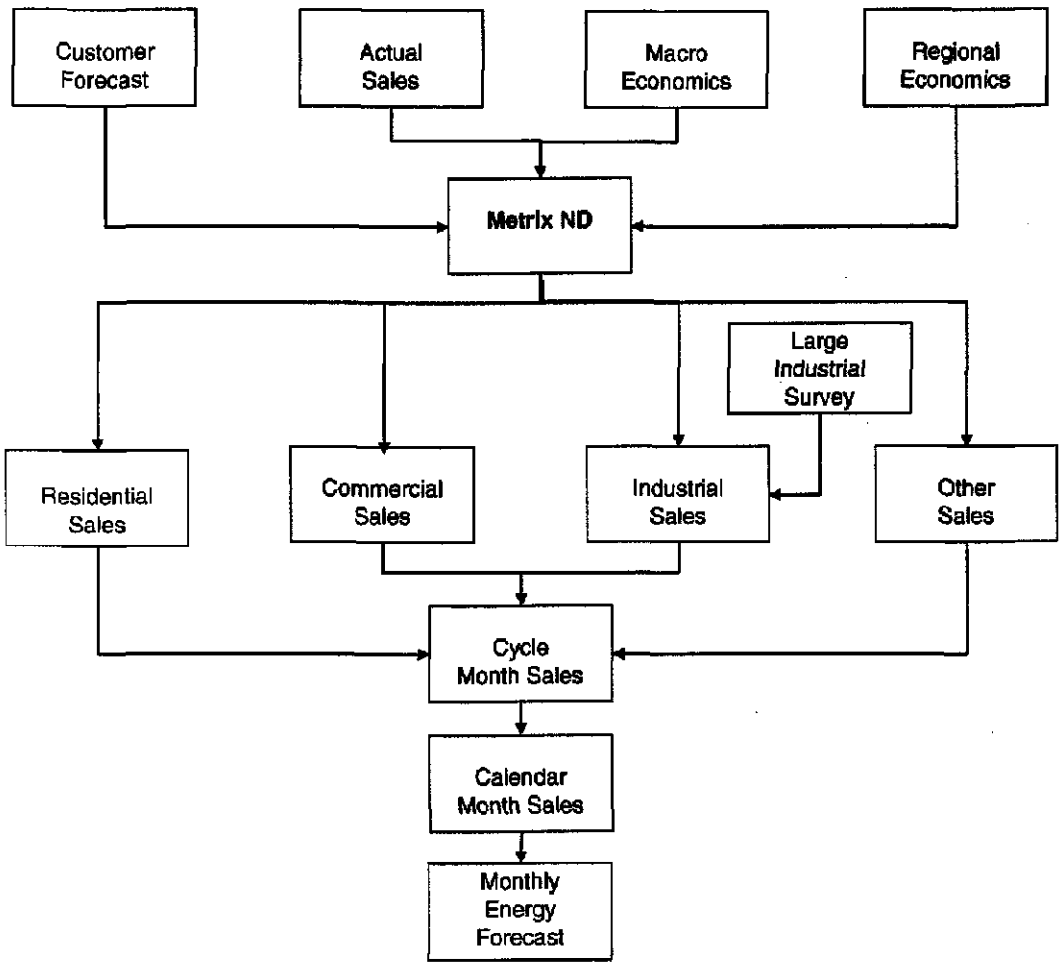
- Large Industrial customer survey for each distribution company.

The preparation of the electric sales forecasts incorporates analysis of each individual class of customer (residential, commercial and industrial). A brief description of the forecast methodology used for each of the three major customer classes follows:

1) Residential - The software used to project residential sales is MetrixND, a package which utilizes a variety of statistical forecasting techniques. MetrixND projects energy usage by fitting regression models to historical residential sales data. In addition, the regression models use forecasts of disposable income, net migration, and a residential customer forecast as economic drivers. The customer forecast is developed using residential population as the main driver. Finally, the models use typical heating degree days (HDD) and cooling degree days (CDD) with a base of either 60 or 65 to account for variations in weather.
2) Commercial – Sales forecasts for this class are developed by fitting regression models to historical commercial sales data, using forecasts of GDP, retail sales, and commercial customers as economic drivers. The models also use typical HDD and CDD with a base of either 60 or 65 to control for variations in weather.
3) Industrial – Sales forecasts for this class are primarily developed by fitting regression models to historical industrial sales data, using forecasts of GDP, retail sales, and industrial customers as economic drivers. These models do not use weather variables, as industrial sales are generally not weather sensitive. The industrial sales forecast also reflects specific information regarding large customer plans regarding their facilities. Information concerning large customers is gathered from customer representatives, and manual adjustments are made to the forecast based on the customer's plans.

A conceptual representation of the electric sales forecasting methodology is shown below:

FIRSTENERGY OPERATING COMPANIES' SALES FORECAST PROCESS (WIRES)



(D) DISTRIBUTIONS FORECAST FORMS

The following pages contain the various forms required by Rule 4901:5-5-04

It should be noted that the forecast for 2009 contains two months of actual data (January and February), and that this forecast does not reflect the impact of any future energy efficiency and demand response programs. It does reflect energy efficiency and demand response programs that are reflected in historical sales and peaks.

4901-5-04(B)(1)(a)

PUCO FORM FE4-D1: EDU SERVICE AREA ENERGY DELIVERY FORECAST
(Megawatt Hours/Year) (a)

Ohio Edison Company

	Year	(1) Residential	(2) Commercial	(3) Industrial	(4) Railways & Railroads	(5) Other (b)	(6) Total End-Use Delivery (1 + 2 + 3 + 4 +5)	(7) Line Losses And Company Use	(8) Total Energy (6 + 7)
-5	2004	8,629,000	6,976,000	9,126,000	-	138,000	24,869,000	1,886,000	26,755,000
-4	2005	9,237,000	7,199,000	9,429,000	-	148,000	26,013,000	2,163,000	28,176,000
-3	2006	8,890,000	7,075,000	9,321,000	-	146,000	25,432,000	2,113,000	27,545,000
-2	2007	9,379,000	7,297,000	9,230,000	-	146,000	26,052,000	1,610,000	27,662,000
-1	2008	9,250,000	7,157,000	8,726,000	-	146,000	25,279,000	1,531,000	26,810,000
0	2009	9,496,000	7,121,000	7,158,000	-	140,000	23,915,000	1,824,000	25,739,000
1	2010	9,471,000	7,127,000	7,837,000	-	141,000	24,576,000	1,847,000	26,423,000
2	2011	9,686,000	7,259,000	8,816,000	-	141,000	25,902,000	1,915,000	27,817,000
3	2012	9,903,000	7,391,000	9,178,000	-	140,000	26,612,000	1,960,000	28,572,000
4	2013	10,057,000	7,420,000	9,187,000	-	140,000	26,804,000	1,979,000	28,783,000
5	2014	10,210,000	7,444,000	9,196,000	-	140,000	26,990,000	1,996,000	28,986,000
6	2015	10,387,000	7,486,000	9,205,000	-	139,000	27,217,000	2,018,000	29,235,000
7	2016	10,591,000	7,533,000	9,214,000	-	139,000	27,477,000	2,043,000	29,520,000
8	2017	10,784,000	7,577,000	9,224,000	-	139,000	27,724,000	2,066,000	29,790,000
9	2018	10,984,000	7,616,000	9,233,000	-	138,000	27,971,000	2,090,000	30,061,000
10	2019	11,185,000	7,655,000	9,242,000	-	138,000	28,220,000	2,113,000	30,333,000

(a) To be filled out by all EDUs. The category breakdown should refer to the Ohio portion of the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

PUCO FORM FE4-D1: EDU SERVICE AREA ENERGY DELIVERY FORECAST
(Megawatt Hours/Year) (a)

The Cleveland Electric Illuminating Company

		(1)	(2)	(3)	(4)	(5)	(6) Total End-Use Delivery	(7) Line Losses And	(8) Total Energy
	Year	Residential	Commercial	Industrial	Railways & Railroads	Other (b)	(1 + 2 + 3 + 4 +5)	Company Use	(6 + 7)
-5	2004	5,264,000	4,817,000	9,006,000	-	162,000	19,249,000	1,557,000	20,806,000
-4	2005	5,700,000	4,998,000	9,041,000	-	172,000	19,911,000	1,738,000	21,649,000
-3	2006	5,442,000	4,784,000	8,898,000	-	168,000	19,292,000	1,335,000	20,627,000
-2	2007	5,670,000	4,936,000	8,944,000	-	168,000	19,718,000	1,397,000	21,115,000
-1	2008	5,606,000	4,840,000	8,689,000	-	167,000	19,302,000	1,359,000	20,661,000
0	2009	5,705,000	4,888,000	7,445,000	-	165,000	18,203,000	1,471,000	19,674,000
1	2010	5,627,000	4,874,000	8,013,000	-	164,000	18,678,000	1,497,000	20,175,000
2	2011	5,740,000	4,863,000	8,814,000	-	163,000	19,580,000	1,556,000	21,136,000
3	2012	5,864,000	4,854,000	9,101,000	-	162,000	19,981,000	1,586,000	21,567,000
4	2013	5,944,000	4,849,000	9,110,000	-	162,000	20,065,000	1,594,000	21,659,000
5	2014	6,009,000	4,847,000	9,119,000	-	161,000	20,136,000	1,601,000	21,737,000
6	2015	6,087,000	4,844,000	9,128,000	-	160,000	20,219,000	1,609,000	21,828,000
7	2016	6,176,000	4,843,000	9,138,000	-	159,000	20,316,000	1,618,000	21,934,000
8	2017	6,253,000	4,837,000	9,147,000	-	158,000	20,395,000	1,626,000	22,021,000
9	2018	6,327,000	4,834,000	9,156,000	-	158,000	20,475,000	1,633,000	22,108,000
10	2019	6,397,000	4,831,000	9,165,000	-	157,000	20,550,000	1,641,000	22,191,000

(a) To be filled out by all EDUs. The category breakdown should refer to the Ohio portion of the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

PUCO FORM FE4-D1: EDU SERVICE AREA ENERGY DELIVERY FORECAST
(Megawatt Hours/Year) (a)

The Toledo Edison Company

	Year	(1) Residential	(2) Commercial	(3) Industrial	(4) Railways & Railroads	(5) Other (b)	(6) Total End-Use Delivery (1 + 2 + 3 + 4 +5)	(7) Line Losses And Company Use	(8) Total Energy (6 + 7)
-5	2004	2,316,000	2,796,000	5,006,000	-	56,000	10,174,000	880,000	11,054,000
-4	2005	2,543,000	2,938,000	5,110,000	-	64,000	10,655,000	685,000	11,340,000
-3	2006	2,430,000	2,821,000	5,139,000	-	58,000	10,448,000	730,000	11,178,000
-2	2007	2,538,000	2,889,000	5,205,000	-	58,000	10,690,000	587,000	11,277,000
-1	2008	2,523,000	2,850,000	4,851,000	-	57,000	10,281,000	607,000	10,888,000
0	2009	2,547,000	2,783,000	4,168,000	-	55,000	9,553,000	604,000	10,157,000
1	2010	2,537,000	2,805,000	4,514,000	-	55,000	9,911,000	615,000	10,526,000
2	2011	2,579,000	2,875,000	5,013,000	-	55,000	10,522,000	639,000	11,161,000
3	2012	2,625,000	2,973,000	5,196,000	-	54,000	10,848,000	656,000	11,504,000
4	2013	2,654,000	3,028,000	5,201,000	-	54,000	10,937,000	664,000	11,601,000
5	2014	2,678,000	3,055,000	5,206,000	-	53,000	10,992,000	668,000	11,660,000
6	2015	2,706,000	3,076,000	5,211,000	-	53,000	11,046,000	673,000	11,719,000
7	2016	2,737,000	3,097,000	5,216,000	-	53,000	11,103,000	678,000	11,781,000
8	2017	2,763,000	3,114,000	5,222,000	-	52,000	11,151,000	682,000	11,833,000
9	2018	2,786,000	3,127,000	5,227,000	-	52,000	11,192,000	686,000	11,878,000
10	2019	2,808,000	3,135,000	5,232,000	-	51,000	11,226,000	688,000	11,914,000

(a) To be filled out by all EDUs. The category breakdown should refer to the Ohio portion of the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

4901-5-04(B)(1)(b)

PUCO FORM FE4-D1: EDU SERVICE AREA ENERGY DELIVERY FORECAST
(Megawatt Hours/Year) (a)

Total Ohio

	Year	(1) Residential	(2) Commercial	(3) Industrial	(4) Railways & Railroads	(5) Other (b)	(6) Total End-Use Delivery (1 + 2 + 3 + 4 +5)	(7) Line Losses And Company Use	(8) Total Energy (6 + 7)
-5	2004	16,209,000	14,589,000	23,138,000	-	356,000	54,292,000	4,323,000	58,615,000
-4	2005	17,480,000	15,135,000	23,580,000	-	384,000	56,579,000	4,586,000	61,165,000
-3	2006	16,762,000	14,680,000	23,358,000	-	372,000	55,172,000	4,178,000	59,350,000
-2	2007	17,587,000	15,122,000	23,379,000	-	372,000	56,460,000	3,594,000	60,054,000
-1	2008	17,379,000	14,847,000	22,266,000	-	370,000	54,862,000	3,497,000	58,359,000
0	2009	17,748,000	14,792,000	18,771,000	-	360,000	51,671,000	3,899,000	55,570,000
1	2010	17,635,000	14,806,000	20,364,000	-	360,000	53,165,000	3,959,000	57,124,000
2	2011	18,005,000	14,997,000	22,643,000	-	359,000	56,004,000	4,110,000	60,114,000
3	2012	18,392,000	15,218,000	23,475,000	-	356,000	57,441,000	4,202,000	61,643,000
4	2013	18,655,000	15,297,000	23,498,000	-	356,000	57,806,000	4,237,000	62,043,000
5	2014	18,897,000	15,346,000	23,521,000	-	354,000	58,118,000	4,265,000	62,383,000
6	2015	19,180,000	15,406,000	23,544,000	-	352,000	58,482,000	4,300,000	62,782,000
7	2016	19,504,000	15,473,000	23,568,000	-	351,000	58,896,000	4,339,000	63,235,000
8	2017	19,800,000	15,528,000	23,593,000	-	349,000	59,270,000	4,374,000	63,644,000
9	2018	20,097,000	15,577,000	23,616,000	-	348,000	59,638,000	4,409,000	64,047,000
10	2019	20,390,000	15,621,000	23,639,000	-	346,000	59,996,000	4,442,000	64,438,000

(a) To be filled out by all EDUs operating across Ohio boundaries. The category breakdown should refer to the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.

PUCO FORM FE4-D2: EDU SERVICE AREA ENERGY DELIVERY FORECAST
(Megawatt Hours/Year) (a) ©

FirstEnergy System

		(1)	(2)	(3)	(4)	(5)	(6) Total End-Use Delivery	(7)	(8) Total Energy
	Year	Residential	Commercial	Industrial	Railways & Railroads	Other (b)	(1 + 2 + 3 + 4 +5)	Line Losses And Company Use	(6 + 7)
-5	2004	17,760,000	15,888,000	24,711,000	-	363,000	58,722,000	4,980,000	63,702,000
-4	2005	19,144,000	16,502,000	25,209,000	-	391,000	61,246,000	4,969,000	66,215,000
-3	2006	18,372,000	16,036,000	25,055,000	-	379,000	59,842,000	4,485,000	64,327,000
-2	2007	19,277,000	16,536,000	25,006,000	-	378,000	61,197,000	4,365,000	65,562,000
-1	2008	19,046,000	16,251,000	23,880,000	-	376,000	59,553,000	4,114,000	63,667,000
0	2009	19,528,000	16,193,000	20,118,000	-	366,000	56,205,000	4,221,000	60,426,000
1	2010	19,396,000	16,200,000	21,881,000	-	367,000	57,844,000	4,284,000	62,128,000
2	2011	19,811,000	16,421,000	24,330,000	-	366,000	60,928,000	4,447,000	65,375,000
3	2012	20,252,000	16,709,000	25,169,000	-	363,000	62,493,000	4,550,000	67,043,000
4	2013	20,559,000	16,832,000	25,198,000	-	363,000	62,952,000	4,593,000	67,545,000
5	2014	20,838,000	16,912,000	25,227,000	-	361,000	63,338,000	4,627,000	67,965,000
6	2015	21,162,000	16,997,000	25,257,000	-	359,000	63,775,000	4,668,000	68,443,000
7	2016	21,532,000	17,090,000	25,288,000	-	358,000	64,268,000	4,713,000	68,981,000
8	2017	21,870,000	17,172,000	25,320,000	-	356,000	64,718,000	4,755,000	69,473,000
9	2018	22,209,000	17,248,000	25,349,000	-	355,000	65,161,000	4,796,000	69,957,000
10	2019	22,541,000	17,316,000	25,379,000	-	353,000	65,589,000	4,835,000	70,424,000

(a) To be filled out by all EDUs operating across Ohio boundaries. The category breakdown should refer to the EDU's total service area.
(b) Such as Street & Highway Lighting, Interdepartmental and Other Public Authorities.
(c) These data include energy for Pennsylvania Power as well as the 3 Ohio companies.

PUCO FORM FE4-D4: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST
(Megawatts) (a)

Ohio Edison Company

	Year	Summer	Winter (b)
-5	2004	4,778	4,344
-4	2005	5,418	4,375
-3	2006	5,492	4,409
-2	2007	5,345	4,153
-1	2008	4,997	3,953
0	2009	5,270	4,300
1	2010	5,356	4,343
2	2011	5,423	4,392
3	2012	5,467	4,429
4	2013	5,503	4,464
5	2014	5,543	4,504
6	2015	5,587	4,548
7	2016	5,635	4,590
8	2017	5,680	4,634
9	2018	5,725	4,679
10	2019	5,771	4,724

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

PUCO FORM FE4-D4: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST
(Megawatts) (a)

The Cleveland Electric Illuminating Company

	Year	Summer	Winter (b)
-5	2004	3,825	3,168
-4	2005	4,196	3,219
-3	2006	4,341	3,285
-2	2007	4,155	3,152
-1	2008	3,982	3,076
0	2009	4,113	3,257
1	2010	4,224	3,391
2	2011	4,379	3,458
3	2012	4,436	3,510
4	2013	4,489	3,561
5	2014	4,543	3,613
6	2015	4,599	3,667
7	2016	4,656	3,720
8	2017	4,711	3,773
9	2018	4,766	3,827
10	2019	4,820	3,881

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

PUCO FORM FE4-D4: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST
(Megawatts) (a)

The Toledo Edison Company

	Year	Summer	Winter (b)
-5	2004	1,881	1,675
-4	2005	2,001	1,636
-3	2006	2,119	1,672
-2	2007	2,002	1,620
-1	2008	1,899	1,818
0	2009	1,998	1,666
1	2010	2,030	1,678
2	2011	2,053	1,698
3	2012	2,068	1,708
4	2013	2,080	1,720
5	2014	2,094	1,733
6	2015	2,108	1,748
7	2016	2,124	1,761
8	2017	2,137	1,774
9	2018	2,149	1,787
10	2019	2,235	1,800

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

PUCO FORM FE4-D4: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST
(Megawatts) (a)

Total Ohio

	Year	Summer	Winter (b)
-5	2004	10,442	9,167
-4	2005	11,543	9,203
-3	2006	12,751	9,328
-2	2007	11,342	8,832
-1	2008	10,670	8,743
0	2009	11,177	9,157
1	2010	11,401	9,344
2	2011	11,642	9,479
3	2012	11,755	9,578
4	2013	11,855	9,676
5	2014	11,961	9,780
6	2015	12,073	9,892
7	2016	12,191	9,999
8	2017	12,303	10,109
9	2018	12,414	10,215
10	2019	12,524	10,324

(a) To be filled out by EDUs operating across Ohio boundaries. Data should refer to the the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

PUCO FORM FE4-D5: EDU SYSTEM SEASONAL PEAK LOAD DEMAND FORECAST
(Megawatts) (a) (c)

FirstEnergy System.

	Year	Summer	Winter (b)
-5	2004	11,322	9,991
-4	2005	12,570	10,063
-3	2006	12,751	10,234
-2	2007	12,383	9,711
-1	2008	11,882	9,558
0	2009	12,143	10,075
1	2010	12,323	10,227
2	2011	12,585	10,382
3	2012	12,715	10,495
4	2013	12,829	10,607
5	2014	12,950	10,727
6	2015	13,079	10,856
7	2016	13,215	10,979
8	2017	13,343	11,105
9	2018	13,470	11,232
10	2019	13,594	11,361

(a) To be filled out by EDUs operating across Ohio boundaries. Data should refer to the the EDU's total service area.

(b) Winter load reference is to peak loads which follow the summer peak load.

(c) These data include load for Pennsylvania Power as well as the 3 Ohio companies.

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

Ohio Edison Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	2,467,800 *	-	-
February	2,107,000 *	-	-
March	2,149,800	-	-
April	1,967,500	-	-
May	1,956,500	-	-
June	2,155,100	-	-
July	2,332,400	-	-
August	2,324,500	-	-
September	2,021,600	-	-
October	1,987,400	-	-
November	2,022,900	-	-
December	2,246,500	-	-
Total	25,739,000		
Year 1 - 2010 (d)			
January	2,293,500	-	-
February	2,110,700	-	-
March	2,190,400	-	-
April	2,026,500	-	-
May	2,021,100	-	-
June	2,223,000	-	-
July	2,409,100	-	-
August	2,419,400	-	-
September	2,118,400	-	-
October	2,102,100	-	-
November	2,142,000	-	-
December	2,372,800	-	-
Total	26,423,000		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

The Cleveland Electric Illuminating Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	1,836,100 *	-	-
February	1,572,500 *	-	-
March	1,642,500	-	-
April	1,516,300	-	-
May	1,537,700	-	-
June	1,655,100	-	-
July	1,796,800	-	-
August	1,806,300	-	-
September	1,555,600	-	-
October	1,523,400	-	-
November	1,534,800	-	-
December	1,696,900	-	-
Total	19,674,000		
Year 1 - 2010 (d)			
January	1,749,700	-	-
February	1,592,800	-	-
March	1,671,300	-	-
April	1,552,100	-	-
May	1,578,500	-	-
June	1,700,300	-	-
July	1,847,500	-	-
August	1,866,200	-	-
September	1,620,100	-	-
October	1,602,300	-	-
November	1,614,500	-	-
December	1,779,700	-	-
Total	20,175,000		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

The Toledo Edison Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	985,200 *	-	-
February	741,500 *	-	-
March	867,000	-	-
April	783,400	-	-
May	796,100	-	-
June	855,700	-	-
July	904,700	-	-
August	929,800	-	-
September	816,700	-	-
October	800,500	-	-
November	810,400	-	-
December	886,000	-	-
Total	10,157,000		
Year 1 - 2010 (d)			
January	894,600	-	-
February	829,600	-	-
March	882,100	-	-
April	805,400	-	-
May	824,700	-	-
June	880,900	-	-
July	930,800	-	-
August	969,700	-	-
September	856,900	-	-
October	849,600	-	-
November	861,100	-	-
December	940,600	-	-
Total	10,526,000		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

FirstEnergy System

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b) (e)	Total System (c)
January	5,269,100 *	5,768,700 *	-
February	4,421,000 *	4,825,900 *	-
March	4,659,300	5,077,400	-
April	4,267,200	4,638,800	-
May	4,290,300	4,639,700	-
June	4,665,900	5,037,200	-
July	5,033,900	5,453,800	-
August	5,060,600	5,485,100	-
September	4,393,900	4,787,400	-
October	4,311,300	4,699,000	-
November	4,368,100	4,749,800	-
December	4,829,400	5,263,200	-
Total	55,570,000	60,426,000	
Year 1 - 2010 (d)			
January	4,937,800	5,395,100	-
February	4,533,100	4,949,000	-
March	4,743,800	5,178,700	-
April	4,378,000	4,764,400	-
May	4,424,300	4,791,300	-
June	4,804,200	5,193,600	-
July	5,187,400	5,622,800	-
August	5,255,300	5,698,900	-
September	4,595,400	5,007,400	-
October	4,554,000	4,959,400	-
November	4,617,600	5,019,100	-
December	5,093,100	5,548,300	-
Total	57,124,000	62,128,000	

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

(e) These data include energy for Pennsylvania Power as well as the 3 Ohio companies.

PUCO FORM FE4-D7: EDU's TOTAL MONTHLY ENERGY FORECAST (MWh)

Year 0 - 2009(d)	Ohio Edison Company (a)	The Cleveland Electric Illuminating Company (a)	Toledo Edison Company (a)	FirstEnergy System (b) (e)	Total System (c)
January	2,467,800 *	1,836,100 *	965,200 *	5,768,700 *	-
February	2,107,000 *	1,572,500 *	741,500 *	4,825,900 *	-
March	2,149,800	1,842,500	867,000	5,077,400	-
April	1,967,500	1,516,300	783,400	4,638,800	-
May	1,956,500	1,537,700	796,100	4,639,700	-
June	2,155,100	1,655,100	855,700	5,037,200	-
July	2,332,400	1,796,800	904,700	5,453,800	-
August	2,324,500	1,806,300	929,800	5,485,100	-
September	2,021,600	1,555,600	816,700	4,787,400	-
October	1,987,400	1,523,400	800,500	4,699,000	-
November	2,022,900	1,534,800	810,400	4,749,800	-
December	2,246,500	1,696,900	886,000	5,253,200	-
Total	25,739,000	19,674,000	10,157,000	60,426,000	
Year 1 - 2010(d)					
January	2,293,500	1,749,700	894,600	5,395,100	-
February	2,110,700	1,592,800	829,600	4,949,000	-
March	2,190,400	1,671,300	882,100	5,178,700	-
April	2,020,500	1,552,100	805,400	4,764,400	-
May	2,021,100	1,576,500	824,700	4,791,300	-
June	2,223,000	1,700,300	880,900	5,193,600	-
July	2,409,100	1,847,500	930,800	5,622,800	-
August	2,419,400	1,866,200	969,700	5,698,900	-
September	2,118,400	1,620,100	856,900	5,007,400	-
October	2,102,100	1,602,300	849,600	4,959,400	-
November	2,142,000	1,614,500	861,100	5,019,100	-
December	2,372,800	1,779,700	940,600	5,548,300	-
Total	26,423,000	20,175,000	10,526,000	62,128,000	

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

(e) These data include energy for Pennsylvania Power as well as the 3 Ohio companies.

PUCO FORM FE4-D8: EDU's TOTAL MONTHLY INTERNAL PEAK LOAD FORECAST
(Megawatts)

Ohio Edison Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	4,054 *	-	-
February	3,818 *	-	-
March	3,827	-	-
April	3,606	-	-
May	4,267	-	-
June	4,775	-	-
July	4,914	-	-
August	5,270	-	-
September	4,190	-	-
October	3,781	-	-
November	3,904	-	-
December	4,300	-	-
Total	5,270		
Year 1 - 2010 (d)			
January	4,134	-	-
February	4,093	-	-
March	3,883	-	-
April	3,662	-	-
May	4,332	-	-
June	4,851	-	-
July	5,008	-	-
August	5,356	-	-
September	4,260	-	-
October	3,839	-	-
November	3,952	-	-
December	4,343	-	-
Total	5,356		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D8: EDU's TOTAL MONTHLY INTERNAL PEAK LOAD FORECAST
(Megawatts)

The Cleveland Electric Illuminating Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	3,059 *	-	-
February	2,957 *	-	-
March	2,971	-	-
April	2,819	-	-
May	3,327	-	-
June	3,701	-	-
July	3,860	-	-
August	4,113	-	-
September	3,285	-	-
October	2,987	-	-
November	3,000	-	-
December	3,257	-	-
Total	4,113		
Year 1 - 2010 (d)			
January	3,196	-	-
February	3,154	-	-
March	3,042	-	-
April	2,895	-	-
May	3,414	-	-
June	3,799	-	-
July	3,975	-	-
August	4,224	-	-
September	3,380	-	-
October	3,134	-	-
November	3,141	-	-
December	3,391	-	-
Total	4,224		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D8: EDU's TOTAL MONTHLY INTERNAL PEAK LOAD FORECAST
(Megawatts)

The Toledo Edison Company

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b)	Total System (c)
January	1,689 *	-	-
February	1,818 *	-	-
March	1,512	-	-
April	1,393	-	-
May	1,622	-	-
June	1,861	-	-
July	1,875	-	-
August	1,998	-	-
September	1,694	-	-
October	1,518	-	-
November	1,570	-	-
December	1,866	-	-
Total	1,998		
Year 1 - 2010 (d)			
January	1,635	-	-
February	1,614	-	-
March	1,542	-	-
April	1,421	-	-
May	1,650	-	-
June	1,894	-	-
July	1,910	-	-
August	2,030	-	-
September	1,720	-	-
October	1,538	-	-
November	1,588	-	-
December	1,678	-	-
Total	2,030		

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.

(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.

(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.

(d) Actual data shall be indicated with an asterisk (*).

PUCO FORM FE4-D8: EDU's TOTAL MONTHLY INTERNAL PEAK LOAD FORECAST
(Megawatts)

FirstEnergy System.

Year 0 - 2009 (d)	Ohio Portion (a)	Total Service Area (b) (e)	Total System (c)
January	8,743 *	9,507 *	-
February	8,439 *	9,300 *	-
March	8,161	8,976	-
April	7,607	8,360	-
May	9,092	9,984	-
June	10,092	11,027	-
July	10,482	11,437	-
August	11,177	12,143	-
September	9,062	9,916	-
October	8,031	8,787	-
November	8,378	9,176	-
December	9,157	10,075	-
Total	11,177	12,143	
Year 1 - 2010 (d)			
January	8,890	9,724	-
February	8,764	9,616	-
March	8,316	9,105	-
April	7,763	8,492	-
May	9,271	10,152	-
June	10,295	11,205	-
July	10,722	11,649	-
August	11,401	12,323	-
September	9,250	10,076	-
October	8,250	8,979	-
November	8,582	9,345	-
December	9,344	10,227	-
Total	11,401	12,323	

(a) To be filled out by all EDUs. Data should refer to the Ohio portion of the EDU's total service area in this column.
(b) EDUs operating across Ohio boundaries shall provide data for the total service area in this column.
(c) EDUs operating as a part of an integrated operating system shall provide data for the total system in this column.
(d) Actual data shall be indicated with an asterisk (*).
(e) These data include load for Pennsylvania Power as well as the 3 Ohio companies.

(E) SUBSTANTIATION OF THE PLANNED DISTRIBUTION SYSTEM

1) Thermal Overloading of Distribution Circuits and Equipment

Each of the FirstEnergy Operating Companies perform distribution planning for their own service area. Distribution circuits range from 2,400 volts to 34,500 volts depending upon the area. These distribution class circuits are all analyzed using similar techniques. Historically many methods were used to collect and analyze information concerning loading on circuits including reading substation meters and aggregating customer load data. The FirstEnergy System's distribution systems are operated as radial systems. Planning for the sub-transmission systems (11.5kV, 23kV, 34.5kV and 46kV) is provided by local regional engineering groups in collaboration with transmission system planners. The FirstEnergy System also has 22.86 kV and 34.5kV radial four-wire systems that are operated and planned as distribution facilities.

The FirstEnergy System provides the individual operating company personnel with the ability to forecast loads, by feeder and substation transformer, and in this process the program compares the forecasted load against the thermal ratings of the equipment. Any overloads are indicated on the output reports from standard load forecasting and circuit analyses tools. This provides the fundamental way in which thermal overloads on distribution circuits and equipment are identified.

A load flow program, CYMDST, has been made available to the individual operating companies and regional planners that will extract data from its automated mapping system. The regional planner uses this load flow program for detailed studies of individual circuits that are approaching loading limits. Detailed studies are also performed with this program to analyze the system in response to customer voltage complaints and placing capacitors for reactive and voltage support. CYMTCC is used for distribution circuit protection studies.

2) Voltage Variation on Distribution Circuits

Rule 4901:1-10-04 requires each electric utility to file with the PUCO nominal service voltage information as part of the tariff. Distribution circuits are operated within acceptable ranges to provide proper service voltage to the customer as stated in the companies' tariffs. For secondary service voltage less than 600 volts, the FirstEnergy Operating Companies comply with American National Standards Institute (ANSI) C84.1. For primary voltage service greater than 600 volts, the specified operating range is other than that stated in ANSI C84.1.

3) Analysis and Consideration of Proposed Solutions

When a planner reviews the load forecast and determines that an overload condition may occur in the future, the specific device or conductor that may experience overload is identified. The solution to prevent the overload depends upon the item. For instance, if it were an overhead conductor, replacing the existing conductor with a larger one may provide the required relief. At other times the solution may be to transfer load through a tie to another circuit. In still other instances it may be necessary to add a new circuit and/or substation in the area. Certain issues may also be addressed by working with the customer to develop a solution on the customer side of the meter. The planner will typically develop several alternative solutions and estimate the costs for each of those solutions. The costs will be compared using normal economic analytical techniques, and the solution providing the most economical benefit will be chosen, absent technical constraints and operating concerns.

The analysis for a potential overload of a substation transformer will generally follow the same concepts employed for circuits. Replacement of existing units with larger capacity units or the addition of transformers or substations will be considered. The costs will again be estimated and analyzed using the same economic analysis techniques.

4) Adequacy of Distribution System to withstand Natural Disasters and Overload Conditions.

Rule 4901:1-10-06 requires utilities to comply with the National Electrical Safety Code. These rules require utilities to design, install, and maintain lines and equipment to meet basic requirements. For example, distribution structures are designed to withstand both wind and ice loading. In the event that distribution outages occur, the FirstEnergy Operating Companies have regional dispatching offices that operate around the clock that will respond to system or customer problems.

The distribution system components are, as designed, able to withstand marginal overload conditions. The design of equipment and lines has a temperature component that is incorporated into the rating of the equipment. When an overload occurs, the temperature may exceed its base value. However, there is some margin in the design, which can accommodate such events. Distribution systems have also been historically designed to allow for future growth and to allow the flexibility of transferring loads. While the FirstEnergy Operating Companies' distribution systems are projected to experience moderate to average load growth, in the future some areas may experience higher growth rates and/or large bulk load additions. Areas that are identified as having potential overloads are managed as described in Sections 1 and 3 above. In addition, load growth and overload conditions may also be addressed through alternative approaches. As an example, consistent with their stipulated ESP, Ohio Edison, CEI, and Toledo Edison will develop a proposal to pursue federal funds available under the Economic Recovery Act that may be available for smart grid investment.

5) Studies Regarding Distribution System Improvement

There are guidelines used to select the size of the conductor to use for constructing new distribution circuits. These guidelines were developed by analyzing the losses for a given conductor type and the cost for using that conductor. The recommended size is based on assuring that the savings in losses will cover the increase in cost for the conductor.

The addition of capacitor banks on the distribution system is one of the alternatives that may be considered for reducing thermal loading. Personnel will periodically review distribution circuits to determine the power factor and recommend additional capacitors as necessary. By maintaining a high average power factor on the distribution system, losses are reduced and the system can be loaded close to its thermal capability most efficiently. Capacitor banks also help to improve the overall voltage profile of a system.

Distribution line regulators are another tool used to extend the reach of existing substation capacity. The regulators boost and re-regulate the distribution line voltage where the distance to the customers is such that service voltage violations could occur.

4(F) SWITCHING DIAGRAMS (FILED UNDER SEAL)

CONFIDENTIAL HIGHLY SENSITIVE -CEII