## BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

# OHIO EDISON COMPANY THE CLEVELAND ELECTRIC ILLUMINATING COMPANY AND THE TOLEDO EDISON COMPANY

# ALTERNATIVE ENERGY RESOURCE PLAN 2013 THROUGH 2023

**APRIL 15, 2013** 

**CASE NO. 13-0924-EL-ACP** 

### I. INTRODUCTION

Pursuant to Rule 4901:1-40-03(C) of the Ohio Administrative Code ("OAC"), Ohio Edison Company ("Ohio Edison"), The Cleveland Electric Illuminating Company ("CEI"), and The Toledo Edison Company ("Toledo Edison") (collectively, the "Companies") file their Alternative Energy Resource Plan for compliance with future annual advanced and renewable energy resource benchmarks for the period January 1, 2013 through December 31, 2023 (the "Plan"). This Plan is speculative in nature and is subject to change due to changes in statutory requirements for renewable energy resources, evolution of the alternative energy resource market and the statutory requirements for advanced energy resources taking effect.

## II. ALTERNATIVE ENERGY RESOURCE PLAN

## A. Baselines and Benchmarks for Alternative Energy Resource Compliance

Section 4901:1-40-03(B), OAC, provides that an electric utility's baseline for compliance with the alternative energy resource requirements shall be determined using the following methodology:

. . . the baseline shall be computed as an average of the three preceding calendar years of the total annual number of kilowatt-hours of electricity sold under its standard service offer to any and all retail electric customers whose electric load centers are served by that electric utility and are located within the electric utility's certified territory. The calculation of the baseline shall be based upon the average, annual, kilowatt-hour sales reported in that electric utility's three most recent forecast reports or reporting forms.

In compliance with Section 4901:1-40-03(B) set forth above, the Companies calculated their total annual number of kilowatt-hours of electricity sold to their respective retail electric customers under their standard service offer ("SSO") for each of calendar years 2010, 2011, and 2012 utilizing their three most recent reporting forms (herein referred to respectively as, the "2010 Sales" "2011

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Sales" and "2012 Sales"). The Companies then averaged their respective 2010 Sales, 2011 Sales and 2012 Sales to compute their respective 2013 baselines ("2013 Baselines"). The Companies did not make any adjustments to the 2013 Baselines. *See* Appendix A.

The Companies' baselines, for the purpose of this Plan, for 2014 forward are calculated using 2011 Sales and 2012 Sales (when applicable to formulate an average of the three preceding calendar years), and a projected amount of sales for calendar years 2013 forward, in each case to formulate an average of the three preceding calendar years ("Projected Sales"). The Companies then averaged their respective Projected Sales to compute their respective 2013-2023 baselines ("2013-2023 Baselines"). The Companies' forecast years do reflect shopping levels that may occur. *See* Appendix A. The Companies then calculated their respective renewable energy resources and solar energy resources benchmarks in accordance with Section 4928.64, Revised Code. *See* Appendix A. The Companies do not have a statutory requirement for reporting on advanced energy resources in this ten year planning period.

## **B.** Supply Portfolio Projection

The Companies plan to supply the generation associated with the above baselines in accordance with standard service offer procurement plans ("SSO Procurement Plans").<sup>3</sup> These quantities represent the energy that the suppliers of the SSO will be obligated to supply through applicable supplier master agreements associated with the SSO Procurement Plans.

 $^{1}$  The actual kilowatt hours sold in each of 2010, 2011, and 2012 were reported on the SE-1 Reporting Forms.

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<sup>&</sup>lt;sup>2</sup> The Companies' baselines for calendar years 2013-2023 will be updated to reflect actual sales when such information becomes available, and shall be reported in the Companies' applicable Annual Status Report and Compliance Review.

<sup>&</sup>lt;sup>3</sup> The Companies' SSO Procurement Plans contemplate power purchases. The Companies do not own generation.

## C. Methodology Used to Evaluate Compliance Options

Given that the Companies do not own alternative energy resource facilities, the Companies' methodology or process for assessing compliance options was to evaluate a variety of potential options. Such options included banking and purchasing renewable energy credits ("RECs") through long-term contracts, short-term spot purchases, and competitive requests for proposals. The Companies have purchased and plan to continue to purchase RECs and SRECs through competitive request for proposal solicitation structure for the duration of this ten year plan ("RFP REC Procurement Process"). The RFP REC Procurement Process is an efficient means of meeting the annual benchmarks as required by Section 4928.64 Revised Code, and provides the Companies with market intelligence about potential suppliers and the availability of RECs and SRECs from completed and planned renewable projects. The 2012 RFP REC Procurement Process was managed by Navigant Consulting, Inc. ("NCI"). The Companies plan to retain an independent consultant for the management of future RFP REC Procurement Processes. The Companies, as necessary and as part of a contingency plan, will also continue to purchase RECs and SRECs (both Ohio and Out-of-State) through brokers and bilateral agreements.

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## III. CONCLUSION

The Companies' Plan is filed pursuant to and complies with Section 4901:1-40-03(C), OAC. The Companies appreciate the opportunity to file this initial Plan and expect this Plan will be updated and refined over the ten-year planning horizon.

Respectfully submitted,

/s/ Carrie M. Dunn

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ATTORNEY FOR OHIO EDISON COMPANY, THE CLEVELAND ELECTRIC ILLUMINATING COMPANY AND THE TOLEDO EDISON COMPANY

#### **Ohio Edison Company**

#### Renewable Energy Resources Baselines and Benchmarks

#### (Megawatt Hours/Year)

Planning baselines and benchmarks in the forecasted years are calculated using forecasted SSO Retail Electric Sales and the same percentage of customer sales taking SSO service as 12/2012 actual. Associated compliance baselines and benchmarks will reflect actual SSO Retail Electric Sales.

Year	Delivery Retail Electric Sales Excluding Losses	Delivery Retail Electric Sales Including Losses	Company's Calendar- Month SSO Retail Electric Sales	Renewable Energy Resource Target %	Solar Energy Resource Target %	Alternative Energy Baselines	Renewable Energy Resource Benchmark	Solar Energy Resource Benchmark	Renewable Less Solar Benchmark	Contracted SRECS	Long Term solar RFP	Contracted non-solar RECs	Long Term non-solar RFP	Supply Portfolio Projection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(5)*(7)	(9)=(6)*(7)	(10) = (8)-(9)	(11)	(12)	(13)	(14)	(15)
	22.7% Percent of customer sales taking SSO service on 12/2012 (as shown on PUCO Form SE-1)													
2009			19,043,752											
2010			9,928,843											
2011			6,657,188											
2012			5,889,259											
2013	24,194,463	26,068,944	5,485,954	2.00%	0.09%	7,491,764	149,835	6,743	143,092		3,026		10,085	5,910,982
2014	24,661,030	26,444,094	5,591,746	2.50%	0.12%	6,010,800	150,270	7,213	143,057		3,113		10,376	5,996,045
2015	24,890,721	26,684,251	5,643,827	3.50%	0.15%	5,655,653	197,948	8,483	189,465		3,103		10,344	6,050,499
2016	24,849,922	26,641,337	5,634,576	4.50%	0.18%	5,573,842	250,823	10,033	240,790		3,096		10,320	6,040,769
2017	24,688,871	26,472,558	5,598,059	5.50%	0.22%	5,623,383	309,286	12,371	296,915		3,098		10,327	6,002,499
2018	24,505,814	26,280,841	5,556,551	6.50%	0.26%	5,625,487	365,657	14,626	351,031		3,100		10,334	5,959,029
2019	24,137,327	25,887,229	5,472,999	7.50%		5,596,395	419,730	16,789	402,941		3,096		10,322	5,869,779
2020	23,726,942	25,447,828	5,379,947	8.50%		5,542,536	471,116	18,845	452,271		3,091		10,303	5,770,148
2021	23,380,498	25,078,272	5,301,393	9.50%		5,469,832	519,634	20,785	498,849		3,085		10,282	5,686,353
2022	23,017,663	24,691,445	5,219,122	10.50%		5,384,780	565,402	22,616	542,786		3,356		11,187	5,598,642
2023	22,669,721	24,321,548	5,140,228	11.50%	0.46%	5,300,154	609,518	24,381	585,137		3,618		12,061	5,514,770

Column (2) and (3) PUCO Case No. 13-925-EL-FOR PUCO FORM FE4-D1

Column (4) = 2009 through 2010 From PUCO Form(s) SE-1: Monthly Historical Electricity Data, Part A.

The actual kilowatt hours sold in 2012 were reported by cycle on the SE-1 Report Form. However, the Companies' calculated their baseline based on 2012 calendar year sales. = 2013 through 2023 From Column (2) Times percent of customer sales taking SSO service on 12/2012

Column (5) and (6) from OAC 4901:1-40-03 (A)

Column (7) Average of the three preceding calendar years of Column (4)

Column (8) and (9) from OAC 4901:1-40-03 (A) [Column (9) is not incremental to Column (8)]

Column (10) = Net renewable benchmark

Columns (12) & (14) = Filed in Cases 10-2891-EL-ACP and 11-4625-EL-ACP, as stipulated to in 10-0388-EL-SSO.

Column (15) = Column (3) times the percent of customer sales taking SSO service on 12/2012 Service Offer percent of delivery retail electric sales, SSO supplier is obligated to provide Standard Service Offer percent of delivery retail electric sales including distribution losses.

#### The Cleveland Electric Illuminating Company

#### Renewable Energy Resources Baselines and Benchmarks

#### (Megawatt Hours/Year)

Planning baselines and benchmarks in the forecasted years are calculated using forecasted SSO Retail Electric Sales and the same percentage of customer sales taking SSO service as 12/2012 actual. Associated compliance baselines and benchmarks will reflect actual SSO Retail Electric Sales.

Year	Delivery Retail Electric Sales Excluding Losses	Delivery Retail Electric Sales Including Losses	Company's Calendar- Month SSO Retail Electric Sales	Renewable Energy Resource Target %	Solar Energy Resource Target %	Alternative Energy Baselines	Renewable Energy Resource Benchmark	Solar Energy Resource Benchmark - SRECs	Renewable Less Solar Benchmark - RECs	Contracted SRECS	Long Term solar RFP	Contracted non-solar RECs	Long Term non-solar RFP	Supply Portfolio Projection
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(5)*(7)	(9)=(6)*(7)	(10) = (8)-(9)	(11)	(12)	(13)	(14)	(15)
			14.7%	Percent of cu	stomer sales t	aking SSO serv	rice on 12/201	2 (as shown o	n PUCO Form	SE-1)				
2009			14,450,199											
2010			6,981,963											
2011			3,337,566											
2012			2,866,655											
2013	18,895,386	20,118,747	2,775,682	2.00%	0.09%	4,395,395	87,908	3,956	83,952		1,775		5,917	2,955,390
2014	19,187,184	20,546,610	2,818,546	2.50%		2,993,301	74,833	3,592	71,241		1,550		5,167	3,018,242
2015	19,189,657	20,550,492	2,818,909	3.50%		2,820,294	98,710	4,230	94,480		1,547		5,158	3,018,812
2016	19,106,349	20,466,346	2,806,671	4.50%	0.18%	2,804,379	126,197	5,048	121,149		1,558		5,193	3,006,451
2017	18,921,147	20,272,485	2,779,466	5.50%		2,814,709	154,809	6,192	148,617		1,551		5,169	2,977,974
2018	18,777,182	20,120,845	2,758,318	6.50%		2,801,682	182,109	7,284	174,825		1,544		5,146	2,955,698
2019	18,500,598	19,824,011	2,717,688	7.50%		2,781,485	208,611	8,344	200,267		1,539		5,130	2,912,094
2020	18,197,189	19,496,381	2,673,118	8.50%		2,751,824	233,905	9,356	224,549		1,534		5,115	2,863,966
2021	17,968,121	19,249,483	2,639,469	9.50%		2,716,375	258,056	10,322	247,734		1,532		5,106	2,827,697
2022	17,730,039	18,992,355	2,604,495	10.50%		2,676,758	281,060	11,242	269,818		1,668		5,561	2,789,926
2023	17,530,169	18,776,829	2,575,135	11.50%	0.46%	2,639,027	303,488	12,140	291,348		1,802		6,005	2,758,266

Column (2) and (3) PUCO Case No. 13-925-EL-FOR PUCO FORM FE4-D1

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The actual kilowatt hours sold in 2012 were reported by cycle on the SE-1 Report Form. However, the Companies' calculated their baseline based on 2012 calendar year sales.

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Column (7) Average of the three preceding calendar years of Column (4)

Column (8) and (9) from OAC 4901:1-40-03 (A) [Column (9) is not incremental to Column (8)]

Column (10) = Net renewable benchmark

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Column (15) = Column (3) times the percent of customer sales taking SSO service on 12/2012 Service Offer percent of delivery retail electric sales,

SSO supplier is obligated to provide Standard Service Offer percent of delivery retail electric sales including distribution losses.

<sup>= 2013</sup> through 2023 From Column (2) Times percent of customer sales taking SSO service on 12/2012

#### The Toledo Edison Company

#### Renewable Energy Resources Baselines and Benchmarks

#### (Megawatt Hours/Year)

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	22.6% Percent of customer sales taking SSO service on 12/2012 (as shown on PUCO Form SE-1)													
2009 2010			7,815,831 3,537,132											
2011			2,811,863											
2012	40 407 004	44.074.400	2,560,233	0.000/	0.000/	0.000.740	50.005	0.070	50.700		4 400		0.000	0.505.444
2013	10,487,621	11,074,183	2,372,739	2.00%		2,969,743	59,395	2,673	56,722		1,199		3,998	2,505,444
2014	10,793,964	11,392,349	2,442,046	2.50%		2,581,612	64,540	3,098	61,442		1,337		4,457	2,577,426
2015	10,854,120	11,452,926	2,455,656	3.50%		2,458,339	86,042	3,688	82,354		1,349		4,497	2,591,131
2016 2017	10,866,484 10,902,362	11,465,910 11,501,194	2,458,453	4.50% 5.50%		2,423,480 2,452,052	109,057 134,863	4,362	104,695 129,468		1,346 1,351		4,487	2,594,069 2,602,051
2017	10,933,963	11,531,848	2,466,570 2,473,720	6.50%		2,460,226	159,915	5,395 6,397	153,518		1,356		4,504 4,520	2,608,987
2019	10,854,370	11,444,281	2,455,713	7.50%		2,466,248	184,969	7,399	177,570		1,365		4,549	2,589,175
2020	10,748,107	11,327,650	2,431,672	8.50%		2,465,334	209,553	8,382	201,171		1,375		4,582	2,562,788
2021	10,667,655	11,238,999	2,413,470	9.50%		2,453,702	233,102	9,324	223,778		1,384		4,612	2,542,732
2022	10,584,540	11,147,170	2,394,666	10.50%		2,433,618	255,530	10,221	245,309		1,517		5,056	2,521,956
2023	10,514,040	11,069,084	2,378,716	11.50%		2,413,269	277,526	11,101	266,425		1,647		5,491	2,504,290

Column (2) and (3) PUCO Case No. 13-925-EL-FOR PUCO FORM FE4-D1

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Total Ohio

Renewable Energy Resources Baselines and Benchmarks

#### (Megawatt Hours/Year)

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(5)*(7)	(9)=(6)*(7)	(10) = (8)-(9)	(11)	(12)	(13)	(14)	(15)
	19.8% Percent of customer sales taking SSO service on 12/2012 (weighted average of PUCO Forms SE-1)													
2222			44 000 704			_			_					
2009 2010			41,309,781 20,447,939											
2010			12,806,617											
2012			11,316,147											
2013	53,577,470	57,261,873	10,634,375	2.00%	0.09%	14,856,902	297,138	13,372	283,766		6,000		20,000	11,371,816
2014	54,642,178	58,383,053	10,852,338	2.50%		11,585,713	289,643	13,903	275,740		6,000		20,000	11,591,713
2015	54,934,497	58,687,669	10,918,392	3.50%		10,934,286	382,700	16,401	366,299		6,000		20,000	11,660,443
2016	54,822,754	58,573,594	10,899,700	4.50%	0.18%	10,801,701	486,077	19,443	466,634		6,000		20,000	11,641,289
2017	54,512,380	58,246,236	10,844,095	5.50%	0.22%	10,890,144	598,958	23,958	575,000		6,000		20,000	11,582,524
2018	54,216,959	57,933,535	10,788,589	6.50%	0.26%	10,887,395	707,681	28,307	679,374		6,000		20,000	11,523,713
2019	53,492,295	57,155,522	10,646,400	7.50%	0.30%	10,844,128	813,310	32,532	780,778		6,000		20,000	11,371,049
2020	52,672,238	56,271,859	10,484,737	8.50%	0.34%	10,759,694	914,574	36,583	877,991		6,000		20,000	11,196,902
2021	52,016,274	55,566,754	10,354,332	9.50%		10,639,909	1,010,792	40,431	970,361		6,000		20,000	11,056,782
2022	51,332,242	54,830,970	10,218,283	10.50%		10,495,156	1,101,992	44,079	1,057,913		6,000		20,000	10,910,524
2023	50,713,930	54,167,461	10,094,079	11.50%	0.46%	10,352,450	1,190,532	47,622	1,142,910		6,000		20,000	10,777,326

Column (2) and (3) PUCO Case No. 13-925-EL-FOR PUCO FORM FE4-D1

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Column (10) = Net renewable benchmark

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<sup>= 2013</sup> through 2023 From Column (2) Times percent of customer sales taking SSO service on 12/2012

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Case No(s). 13-0924-EL-ACP

Summary: Text Alternative Energy Resource Plan 2013 through 2023 electronically filed by Ms. Carrie M Dunn on behalf of Ohio Edison Company and The Toledo Edison Company and The Cleveland Electric Illuminating Company