BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

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

ALTERNATIVE ENERGY RESOURCE PLAN 2010 THROUGH 2020

APRIL 15, 2010

CASE NO. 10-506-EL-ACP

I. INTRODUCTION

Pursuant to Section 4901;1-40, 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") submit their Alternative Energy Resource Plan for compliance with future annual advanced and renewable energy resource benchmarks for the period January 1, 2010 through December 31, 2020 (the "Plan"). This Plan is subject to change for a number of reasons, including but not limited to, the statutory requirements for renewable energy resource increase, the alternative energy resource market further develops, the statutory requirements for advanced energy resource take effect in a current calendar year, and as information is obtained regarding the Companies' baselines and benchmarks for any given year covered by this Plan.

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 2007, 2008, and 2009 utilizing

their three most recent reporting forms (herein referred to respectively as, the "2007 Sales" "2008 Sales" and "2009 Sales")¹. The Companies then averaged their respective 2007 Sales, 2008 Sales and 2009 Sales to compute their respective 2010 baselines ("2010 Baselines"). The Companies did not make any adjustments to the 2010 Baseline². See Appendix A.

The Companies' baselines, for the purpose of this Plan, for 2011 forward are calculated using 2008 Sales and 2009 Sales (when applicable to formulate an average of the three preceding calendar years), and a projected amount of sales for calendar years 2010 forward (as reported in the Long Term Forecast Report filed on April 15, 2010³), 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 2011-2020 baselines ("2011-2020 Baselines"). The Companies' forecast years do not reflect any shopping that may occur, nor did the Companies make any adjustments to the 2011-2020 Baselines in this Plan. See Appendix A. The Companies then calculated their respective renewable energy resources and solar energy resources benchmarks in accordance with Amended Substitute Senate Bill 221 ("SB 221"). See Appendix A. The Companies do not have a statutory requirement for advanced energy resources in this ten year planning period.

¹ The actual kilowatt hours sold in each of 2007, 2008, and 2009 were reported on the SB-1 Reporting Forms.

² The 2010 Baselines include the 2009 solar energy resource compliance shortfall as ordered by the Commission on March 10, 2010, Finding and Order for Case No. 09-1922-BL-ACP, Paragraph 8.

³ See, Case No. 10-504-EL-POR.

⁴ The Companies baselines for calendar years 2011-2020 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.

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")⁵. The amount projected to be delivered to the Companies' respective retail electric customers including distribution losses and unaccounted for energy is as reported in the Long Term Forecast Report filed April 15, 2010. See Appendix A. 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.

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 purchasing renewable energy credits ("RECs"), purchasing a bundled energy and REC product, or building alternative energy resource facilities to generate RECs. The Companies are not in the business of generating electricity, renewable or otherwise, and currently do not foresee entering the energy generation business. Thus, the potential option of building an alternative energy resource facility was eliminated. The Companies also eliminated the option of procuring a bundled energy and RECs product, given that their current SSO Procurement Plan strategy for this ten year planning period⁶ is to procure a product for energy that does not include RECs.

The Companies have purchased and plan to continue to purchase RECs through a competitive request for proposal solicitation structure for the duration of this ten year plan ("RFP

⁵ The Companies' SSO Procurement Plans contemplate power purchases. The Companies do not own generation.

⁶ The Companies' SSO Procurement Plan strategy for this ten year planning period is consistent with the Companies' Commission approved Electric Security Plan, Case No. 08-935-BL-SSO.

REC Procurement Process"). The RFP REC Procurement Process is an efficient means of meeting the annual benchmarks as required by SB 221, and provides the Companies with market intelligence about potential suppliers and the availability of RECs from completed and planned renewable projects. The 2009 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 will also continue to explore the feasibility of entering into long term RECs contracts.

D. Impediments to Achieving Compliance

The most significant impediment to achieving compliance (particularly for solar renewable energy resources) is the limited availability of renewable energy resources. Such limited availability is exacerbated by the legislative requirement that fifty percent of the renewable energy resource requirement originate from facilities located within Ohio, and the regulatory requirement that renewable energy resource facilities be certified by the Public Utilities Commission of Ohio ("Commission"). As of July, 2009, NCI had identified less than 1 MW of solar energy resource installed in Ohio, with a portion of such amount already subscribed in long-term contracts or committed to reducing the owners' existing carbon footprint (thus, removed from the marketplace). Given the length of time it takes to bring a new facility (particularly solar) on line, this impediment is likely to continue for some time into the future.

Moreover, in most cases, siting, easements, permits, interconnections, contracts, and site preparation will require twelve to eighteen months. As a result, unless facilities are well under construction at this time, there is little opportunity for new facilities to come online and produce sufficient RECs for some time. Such facilities will also require Commission certification. In short, although the supply of RECs are likely to increase as the market further develops, the demand will also increase as benchmark requirements increase over time making achieving compliance an

ongoing challenge. The Companies may also face an additional challenge in purchasing sufficient solar RECs in 2010 to not only cover the 2010 statutory benchmarks in a tight market, but to also cover the 2009 solar RECs shortfall in 2010. The Companies' only suggestion for addressing impediments to achieving compliance is for the Commission to remain flexible in the event regulatory relief is necessary as this new market develops.

III. CONCLUSION

The Companies' Plan is filed pursuant to and complies with Rule 4901:1-40, OAC. As stated above, the Plan is subject to change as statutory requirements for renewable energy resources increase, requirements for advanced energy resource commence, sufficient quantities of alternative energy resources become reasonably available in the marketplace and as more information becomes available about the Companies' requirements. The Companies' expect this Plan will be updated and refined over the ten-year planning horizon.

Respectfully submitted,

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Electric Illuminating Company, and The Toledo

Edison Company

Ohio Edison Company

Renewable Energy Resource Baselines and Benchmarks

(Megawatt Hours/Year)

Planning baselines and benchmarks that are calculated using forecasted SSO Retail Electric Sales do not reflect any shopping that may occur. Associated compliance baselines and benchmarks will reflect actual SSO Retail Electric Sales,

Supply Portfolio Projection	(12)				24.975.000	25.681.000	26.205.000	26,466,000	26.543.000	26.475,000	26,370,000	26.283.000	26,159,000	25,764,000	00000000
Revised Solar Energy Resource Benchmark	(11)				2,857	i i									
Renewable Less Solar Benchmark	(10)=(8)-(3)				100.350	204,676	317.701	455,777	579,784	825.763	1,069,042	1,305,339	1,537,869	1,767,576	4 080 120
Solar Energy Resource Benchmark	(2)_(9)=(6)				2,048	6,330	13,238	21,476	29,233	36,975	44,543	54,389	64,078	73,649	62 630
Renewable Energy Resource Benchmark	(8)=(5)*(7)				102,398	211,006	330,939	477,253	609,017	862,738	1,113,585	1,359,728	1,601,947	1,841,225	2 070 969
Alternative Energy Baselines	6	ffer			20,479,586	21,100,647	22,062,584	23,862,667	24,360,667	24,649,667	24,746,333	24,722,333	24,645,333	24,549,667	24.364.333
Solar Energy Resource Target %	(9)	100% Assumed Standard Service Offer			0.01%	0.03%	0.06%	0.09%	0.12%	0.15%	0.18%	0.22%	0.26%	0.30%	0.34%
Renewable Energy Resource Target %	(2)	Assumed Stan			0.50%	1.00%	1.50%	200%	2.50%	3.50%	4,50%	2.50%	6.50%	7.50%	8.50%
Company's Calendar- Month SSO Retail Electric Sales	(4)	100%	21,354,818	21,040,189	23,218,000	23,926,000	24,444,000	24,712,000	24,793,000	24,734,000	24,640,000	24,562,000	24,447,000	24,084,000	23,693,000
Delivery Retail Electric Sales Including Losses	ම				24,975,000	25,681,000	26,205,000	26,466,000	26,543,000	26,475,000	26,370,000	26,283,000	26,159,000	25,764,000	25,340,000
Defivery Retail Deliv Electric Sales Elec Excluding In Losses I	(Z)				23,218,000	23,926,000	24,444,000	24,712,000	24,793,000	24,734,000	24,640,000	24,562,000	24,447,000	24,084,000	23,693,000
Year	ε		2007	2008 2008 2008	2010	201	2012	2013	2014	2015	2016	2017	2018	2019	2020

Column (2) and (3) PUCO Case No. 10-504-EJ-FOR PUCO FORM FE4-D1
Column (4) = 2007 through 2009 From PUCO Form (s) From SE-1: Monthly Historical Electricity Data, Part A
= 2010 through 2020 From Column (2) Times Assumed Standard Service Offer Percent
Column (5) and (6) from OAC 4901:1-40-03 (A)
Column (5) and (6) from OAC 4901:1-40-03 (A)
Column (6) and (6) from OAC 4901:1-40-03 (A) [Column (9) is not incremental to Column (8)]
Column (10) = Net renewable benchmark
Column (10) = Net renewable benchmark
Column (11) = Net renewable benchmark
Column (11) = Net service Offer Percent-SSO supplier is obligated to provide Standard Service Offer Percent-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 Resource Baselines and Benchmarks

(Megawatt Hours/Year)

Planning baselines and benchmarks that are calculated using forecasted SSO Retail Electric Sales do not reflect any shopping that may occur. Associated compliance baselines and benchmarks will reflect actual SSO Retail Electric Sales.

	,										_	_				
Supply Portfolio Projection	(12)					19,741,000	19,650,000	19,709,000	19,984,000	20,679,000	20,816,000	20,719,000	20,643,000	20,554,000	20.266.000	19,968,000
Revised Solar Energy Resource Benchmark	(11)					2238										
Renewable Less Solar Benchmark	(10) = (8)-(9)					80,052	161,317	244,556	348,830	436,825	626,026	822,499	1.017,632	1,202,095	1,381,296	1,554,180
Solar Energy Resource Benchmark	(2)=(6)=(6)					1,634	4,989	10,190	16.437	22,025	28,83	34,271	42,401	50.087	57,554	64.758
Renewable Energy Resource Benchmark	(2)=(9)=(8)					81,686	166,306	254,746	365,267	458,850	654,057	856,770	1,060,033	1,252,182	1,438,850	1,618,938
Alternative Energy Baselines	8	Her				16,337,169	16,630,585	16,983,066	18,263,333	18,354,000	18,687,333	19,039,333	19,273,333	19,264,333	19,184,667	19,046,333
Solar Energy Resource Target%	(9)	100% Assumed Standard Service Offer				0.01%	0.03%	0.06%	0.09%	0.12%	0.15%	0.18%	0.22%	0.26%	0.30%	0.34%
Renewable Energy Resource Target %	(2)	Assumed Stan				0.50%	1.00%	1.50%	2,00%	2.50%	3.50%	4.50%	5.50%	6.50%	7.50%	8.50%
Company's Calendar- Morth SSO Retail Electric Sales	Ð	100%	17,403,753	17,157,556	14,450,199	18,284,000	18,215,000	18,291,000	18,556,000	19,215,000	19,347,000	19,258,000	19,188,000	19,108,000	18,843,000	18,570,000
electric Sales Electric Sales Electric Sales Electric Sales Excluding Including Losses Losses	ම					19,741,000	19,650,000	19,709,000	19,984,000	20,679,000	20,816,000	20,719,000	20,643,000	20,554,000	20,266,000	19,968,000
Delivery Retail Electric Sales Excluxing Losses	ß					18,284,000	18,215,000	18,291,000	18,556,000	19,215,000	19,347,000	19,258,000	19,188,000	19,108,000	18,843,000	18,570,000
Year	£		2007	2008	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

Column (2) and (3) PUCO Case No. 10-504-EL-FOR PUCO FORM FE4-D1
Column (4) = 2007 through 2009 From PUCO Form(s) Form SE-1: Monthly Historical Electricity Data, Part A
= 2010 through 2020 From Column (2) Times Assumed Standard Service Offer Percent

Column (5) and (6) from OAC 4901:1-40-03 (A)
Column (7) Average of the three preceding calendar years of Column (4)
Column (7) Average of the three preceding calendar years of Column (4)
Column (10) = Net renewable benchmark
Column (10) = Net renewable benchmark
Column (11) 2009 and 2010 Solar Energy Resource Benchmarks were revised based on Commission March 10, 2010 Finding and Order for Case No. 09-1922-EL-ACP
Column (11) 2009 and 2010 Solar Energy Resource Benchmarks were revised based on Commission March 10, 2010 Finding and Order for Case No. 09-1922-EL-ACP
Column (12) = Column (3) times the Assumed Standard Service Offer Percent-SSO supplier is obligated to provide Standard Service Offer percent of delivery retail electric sales including distribution losses.

The Toledo Edison Company

Renewable Energy Resource Baselines and Benchmarks

(Megawatt Hours/Year)

Planning baselines and benchmarks that are calculated using forecasted SSO Retail Electric Sales do not reflect any shopping that may occur. Associated compliance baselines and benchmarks will reflect actual SSO Retail Electric Sales.

				_							_	_				
Supply Portolio Projection	(12)					10.577.000	10 701 000	10 784 000	11 044 000	11.198.000	11.234.000	11 209 000	11 170 000	11.103.000	10.914.000	10 715 000
Revised Solar Energy Resource Benchmark	(11)					220										
Renewable Less Solar Benchmark	(10) = (8)-(9)					42 551	86.672	134 049	193,216	244.823	350.422	458,366	563,235	665.268	764.832	859 411
Solar Energy Resource Benchmark	(2)_(9)=(6)					888	2.681	5.585	9,104	12,344	15,690	19,099	23,468	27,719	31,868	35,809
Renewable Energy Resource Benchmark	(8) - (5)-(7)					43,419	89.353	139,634	202,320	257,167	366,112	477,465	586,703	692,987	796,700	895.220
Alternative Energy Baselines	8	Offer				8,683,821	8,935,252	9,308,944	10,116,000	10,286,667	10,460,333	10,610,333	10,667,333	10,661,333	10,622,667	10,532,000
Solar Energy Resource Target %	(9)	100% Assumed Standard Service Offer				0.01%	0.03%	90.0	%60.0	0.12%	0.15%	0.18%	0.22%	0.26%	0.30%	0.34%
Renewable Energy Resource Target %	(2)	Assumed Stan				0,50%	1.00%	1.50%	2.00%	2.50%	3.50%	4.50%	5.50%	6.50%	7.50%	8.50%
Company's Calendar- Month SSO Retail Electric Sales	(4)	100%	9,228,709	9,006,924	7,815,831	9,983,000	10,128,000	10,237,000	10,495,000	10,649,000	10,687,000	10,666,000	10,631,000	10,571,000	10,394,000	10,210,000
Defivery Retail Electric Sales Including Losses	(9)					10,577,000	10,701,000	10,784,000	11,044,000	11,198,000	11,234,000	11,209,000	11,170,000	11,103,000	10,914,000	10,715,000
Delivery Retail Defin Electric Sales Elec Excluding In Losses I	8					9,983,000	10,128,000	10,237,000	10,495,000	10,649,000	10,687,000	10,666,000	10,631,000	10,571,000	10,394,000	10,210,000
Year	£		2007	2008	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

Column (2) and (3) PUCO Case No. 10-504-EL-FOR PUCO FORM FE4-D1

Column (4) = 2007 through 2009 From PUCO Form(s) Form SE-1: Monthly Historical Electricity Data, Part A

= 2010 through 2020 From Column (2) Times Assured Standard Service Offer Percent

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

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

Column (5) and (9) from OAC 4901:1-40-03 (A)

Column (10) = Net rewable benchmark

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Column (11) 2009 and 2010 Solar Energy Resource Benchmarks were revised based on Commission March 10, 2010 Finding and Order for Case No. 09-1922-EL-ACP

Column (11) 2009 and 2010 Solar Energy Resource Benchmarks were revised based on Commission March 10, 2010 Finding and Order for Case No. 09-1922-EL-ACP

Column (12) = Column (3) times the Assumed Standard Service Offer Percent- SSO supplier is obligated to provide Standard Service Offer percent of delivery retail electric sales including distribution losses.

Total Ohio

Renewable Energy Resource Baselines and Benchmarks

Planning baselines and benchmarks that are calculated using forecasted SSO Retail Electric Sales do not reflect	any shopping that may occur. Associated compliance baselines and benchmarks will reflect actual SSO Retail	Electric Color
(Megawatt Hours/Year)		

Supply Portfolio Projection	(12)				- 000 000 33	200,000,000	20,032,000	30,030,000	000 000 00	000,024,000	20,223,000	20,000,000	20,030,000	200,010,00	000,444,000
Revised Solar Energy Resource Benchmark	(41)				2000	2									
Renewable Less Solar Benchmark	(6)+(8)=(01)				722 053	350 CEV	806 308	007.833	1 261 432	1 800 544	2349 907	2 886 20K	3.405.232	3 943 704	4 401 720
Solar Energy Resource Benchmark	(3)=(6)*(7)				4 550	14.000	65.00 65.00	47.047	63 602	80.696	97.913	120.258	141.884	163 074	183,406
Renewable Energy Resource Benchmark	(8)=(5)-(7)				227 503	4F6 665	725.319	1.044.840	1.325,034	1.882.907	2,447,820	3.006.464	3,547,116	4.076,775	4.585.126
Alternative Energy Baselines	ε	Xffer			45.500.576	46 666 484	48.354.594	52.242.000	53,001,334	53,797,333	54,395,999	54,662,999	54,570,999	54.357.001	53,942,666
Solar Energy Resource Target %	(9)	100% Assumed Standard Service Offer			0.01%	0.03%	0.06%	0.09%	0.12%	0.15%	0.18%	0.22%	0.26%	0.30%	0.34%
Renewable Energy Resource Target %	(2)	Assumed Stan			0.50%	1.00%	1,50%	2.00%	2.50%	3,50%	4.50%	5,50%	6.50%	7.50%	8.50%
Company's Calendar- Month SSO Retail Electric Sales	(4)	100%	47,987,280	41,309,781	51,485,000	52,269,000	52,972,000	53,763,000	54,657,000	54,768,000	54,564,000	54,381,000	54,126,000	53,321,000	52,473,000
Defivery Retail Electric Sales Including Losses	(6)			ŧ	55,293,000	56,032,000	56,698,000	57,494,000	58,420,000	58,525,000	58,298,000	58,096,000	57,816,000	56,944,000	56,023,000
Delivery Retail Defiv Electric Sales Elec Excluding In Losses L	(Z)			•	51,485,000	52,269,000	52,972,000	53,763,000	54,657,000	54,768,000	54,564,000	54,381,000	54,126,000	53,321,000	52,473,000
Year	Ξ		2007	2009	2010	2	2012	2013 -	2014	2015	2016	2017	2018	2019	2020

Column (2) and (3) PUCO Case No. 10-504-EL-FOR PUCO FORM FE4-D1
Column (4) = 2007 through 2009 From PUCO Form(s) From SE-1: Monthly Historical Electricity Data, Part A
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Column (5) and (6) from OAC 4901:1-40-03 (A)
Column (5) and (6) from OAC 4901:1-40-03 (A) [Column (4)
Column (9) and (9) from OAC 4901:1-40-03 (A) [Column (9) is not incremental to Column (3)]
Column (10) = Net renewable benchmark
Column (11) = Net renewable benchmark
Column (12) = Net renewable benchmark
Column (13) = Net renewable Standard Service Offer Percent- SSO supplier is obligated to provide Standard Service Offer Percent- SSO supplier is obligated to provide Standard Service Offer Percent- SSO supplier is obligated to provide Standard Service Offer Percent of delivery retail electric sales including distribution losses.

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Summary: Report Alternative Energy Resource Plan 2010 Through 2020 electronically filed by Ms. Ebony L Miller on behalf of Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company