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Application of Dayton Power and Light Company **BEFORE THE**

PUBLIC UTILITIES COMMISSION OF OHIO

THE DAYTON POWER AND LIGHT COMPANY

CASE NO. 08-1094-EL-SSO

Book II – Customer Conservation and Energy Management Programs

DIRECT TESTIMONY OF JOHN B. WAGNER, JR

D MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION

- OPERATING INCOME
- D RATE BASE
- ALLOCATIONS
- RATE OF RETURN
- RATES AND TARIFFS
- OTHER

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

DIRECT TESTIMONY OF

JOHN B. WAGNER, JR

ON BEHALF OF THE DAYTON POWER & LIGHT COMPANY

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I. INTRODUCTION

- 2 Q. Please state your name and business address.
- A. My name is John B. Wagner, Jr. My business address is 1065 Woodman Drive, Dayton,
 Ohio 45432.
- 5 Q. By whom and in what capacity are you employed?
- A. I am employed by The Dayton Power and Light Company ("DP&L" or "Company") as
 the Manager, Retail Pricing.
- 8 Q. How long have you been in your present position?
- 9 A. I assumed my present position in March of 2008. Prior to that, I held various positions as
 10 a rate/regulatory consultant and as a Director of Regulatory Services for an electric
 11 utility.
- 12 Q. What are your responsibilities in your current position and to whom do you report?
- A. In my current position, I am responsible for the administration of rates, the development
 of new retail rates and for providing regulatory support. I report to the Director of
 Regulatory Operations of DP&L.
- 16 Q. Will you describe briefly your educational and business background?
- A. Yes. I received a BS degree in Business Administration from The University of South
 Carolina in 1976. I have worked exclusively as a utility rate specialist for the past 32
 years, most of that time as a Vice President of a major consulting firm. I have also
 worked as an independent rate/regulatory consultant and as Director of Regulatory

1		Services for an electric utility. Please see my Exhibit JBW - 1 for a more complete
2		summary of my professional experience.
3	Q.	Have you previously provided testimony before the Public Utilities Commission of
4		Ohio ("PUCO" or the "Commission"), or any other federal, state or local
5		regulatory authority?
6	A.	Yes. I have sponsored testimony before numerous regulatory authorities. Please see my
7		Exhibit $JBW - 1$ for a complete list of my appearances as an expert witness.
8	Q.	What is the purpose of this testimony?
9	A.	The purpose of this testimony is to support and explain: (1) the potential rate designs that
10		will be part of the Customer Conservation and Energy Management ("CCEM") Programs
11		and (2) the likely impact of the proposed CCEM infrastructure, and Energy Efficiency
12		(EE) riders on customers' bills.
13	Q.	What Chapter and Schedules are you supporting?
14	А.	I am supporting Part 5 of Chapter 1, the Executive Summary of the CCEM portion of this
15		case and Schedules E-4 and E-5, which are bill comparisons. I am also supporting the
16		calculation of lost revenue found on Schedule C-5.1.
17 18	11,	DP&L'S CUSTOMER CONSERVATION AND ENERGY MANAGEMENT PROJECT ENABLES NEW RATE OFFERINGS
19	Q.	How do the CCEM Programs enable DP&L to offer new rate structures?
20	A.	CCEM will put in place the advanced metering and complex billing systems needed to

A. CCEM will put in place the advanced metering and complex billing systems needed to

offer a suite of rates that will enable customers to manage better their usage, and to 21

1 control their energy costs. Specifically, the advanced metering component of the system 2 will allow DP&L to send to customers more accurate price signals by charging rates 3 based on the time of use or by notifying customers of an approaching critical peak cost 4 period so that customers can control consumption during high-cost hours. The new 5 billing system will enable DP&L to utilize the data-gathering capability of the advanced 6 metering system and to implement Time-Of-Use (TOU) Pricing, Critical Peak Pricing 7 (CPP), Peak Time Rebates (PTR) and other rate designs that are responsive to its 8 customers' needs. The availability of this new infrastructure will largely determine when 9 DP&L will offer these new pricing options. Upon receipt of PUCO approval for the 10 project, the Company expects that this advanced infrastructure will be sufficiently deployed by 2011 to begin offering the new pricing options. 11

12

Q.

What will be the revenue impact of the proposed rates?

13 A. Each of the proposed rates will be revenue-neutral in comparison to the typical use of the 14 comparable class rate. For example, the residential TOU rate will be revenue-neutral 15 with the typical use regular residential rate. This plan limits the probability that 16 additional revenues will be generated by the new rates while giving customers the 17 opportunity to reduce or shift their energy consumption to affect their bills. Fine tuning 18 of the rate structures will take place in an initial pilot phase of the program to give DP&L 19 an opportunity to gauge customer's reactions and to modify the rate design to reflect 20 DP&L's customers' unique usage and demand patterns.

21 Q. Can you describe the cost components that DP&L will include in the proposed
22 rates?

A. Yes. DP&L is proposing to offer bundled rates that will incorporate all current costs and
 riders charged under the present rates with the exception of Excise Taxes, USF charges
 and the Emission Fee Rider. These charges will continue to be added to the proposed
 bundled TOU rates because their structure makes it impractical to incorporate them into a
 bundled rate.

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Are you proposing specific rates and charges at this time?

7 Α. No. I am offering a rate structure and tariff description at this time, but no specific rates and charges, for two reasons. First, the infrastructure to support the proposed rates, i.e., 8 9 the AMI system and complex billing system, will not be deployed or available until at 10 least 2011. Second, the Company's current rate plan expires in 2010 and the standard 11 offer rates that will be implemented are unknown at this time; it is possible that the 12 standard offer rates will contain a completely new rate structure. It is counterproductive 13 to develop rates and charges based on our current standard rates when a new set of 14 standard rates will be in place at about the same time that the infrastructure to support the 15 new rates reaches the stage of deployment where the new rates can be supported. In 16 other words, it is counterproductive to develop TOU and other rates and charges now 17 when they will be outdated by 2011 when the Company anticipates having a new slate of 18 standard rates and the CCEM infrastructure to support complex rate structures.

19 III. PROPOSED CCEM RATE STRUCTURES

20 Q. Can you describe the new rate structures the Company proposes to complement the
21 CCEM Programs?

A. Yes. The Company is proposing that TOU rates be made available to all non-shopper
 rate classes. In addition, CPP rates will be made available to all non-shopper, non-

residential customers. Finally, a PTR rider will be made available to all customers who are not on the CPP or TOU rates.

3 Q. Are there common features that will be shared by each of the proposed rates?

1

- A. Yes. Each of the rates will be designed to reflect PJM's peak periods, which are
 currently in the summer season (June September) covering at least the hours of 2 p.m.
 to 9 p.m. Where possible, PJM cost differentials (between peak hours, off peak hours
 and critical hours) will be utilized in establishing the magnitude of cost differentials for
 the proposed rates. This rate design will be done with the goal of revenue neutrality
 within the comparable standard class rates.
- 10Q.Do you have sample tariffs to illustrate the rate structures you anticipate making11available in 2011?
- A. Yes. Attached are illustrative tariff structures for Residential TOU (Exhibit JBW-2),
 Residential Heating TOU (Exhibit JBW-3), C & I TOU (Exhibit JBW-4) and C & I
 Critical Peak Pricing (Exhibit JBW-5). The Company anticipates that the PTR option
 will be offered as a rider, available to any customer.
- 16 Q. What are the key objectives for the TOU, CPP and PTR rate options?
- A. These rates are intended to give customers a suite of pricing options so that they may
 better control their electricity costs in an interactive environment. It would be impossible
 to make these options available to customers without the two-way communication
 capability of the proposed AMI system. Unlike traditional TOU and Demand Side
 Management (DSM) programs, the two-way function will allow DP&L to alert customers
 to critical peak cost events and in near real-time to assess their response. This powerful

capability should facilitate rapid fine tuning of pricing so that the most productive rates or
 elements of rates can be reconfigured and made available to customers to maximize
 energy efficiency load reductions. It is truly an exciting prospect for ratemaking.

4 Q.

Can you give an overview of how the TOU, CPP and PTR pricing options work?

5 Α. Yes. Each of the rates will reflect the PJM cost factors that determine a large part of 6 DP&L's cost structure. The TOU rate will be seasonally differentiated (Summer, Winter) 7 with fixed time periods. The peak time periods will coincide with PJM peak periods; 8 today the peak PJM period is in the Summer between the hours of 1 p.m. and 9 p.m. The 9 CPP rate will be a variation of the TOU rate with a critical peak period within the peak 10 period. Like the TOU rate, the critical peak will be complementary with PJM cost 11 factors. This type of TOU and CPP rate structure offers both an incentive to reduce 12 energy consumption in high-cost periods and a penalty for consumption in high-cost 13 periods. This structure is in contrast to the PTR rider, which is completely voluntary and 14 offers only a rebate payment for reducing consumption during peak-cost periods. The 15 incentive under PTR should be less than under TOU or CPP because of the commitment 16 necessary to be part of those programs.

17 Q. Are the rates you have identified here the only pricing options you anticipate 18 making available in 2011?

A. No. The Company anticipates that these are the minimum options that will be available
 in 2011. DP&L will continue to evaluate the latest developments for energy efficiency
 pricing and incorporate the state-of-the-art pricing options into its suite of offerings.

IV. LOST REVENUE CALCULATION

Q. Did the Company calculate lost revenues associated with implementing the energy
efficiency programs?

4 A. Yes. Consistent with ORC §4928.143(B)(2)(h), the Company calculated the lost 5 revenues that will occur as a result of implementing the energy efficiency programs. The estimated energy savings impact from the EE programs was calculated by year by tariff 6 7 class. Average rates by tariff class were applied to those energy savings to determine the 8 amount of lost revenues that the Company will experience. Average rates were increased 9 at 3.25% annually beginning in 2011 to account for the cost of inflation. The level of 10 fuel expenses that is currently built into rates was backed out of this calculation with the 11 expectation that if the retail energy sale did not occur, the fuel expense would not be 12 incurred by the Company. Thus, the lost revenue was lowered to account for the cost of 13 unused fuel. The lost revenues that resulted were summed and added to the Energy 14 Efficiency Rider (EER) revenue requirement.

- 15 Q. What fuel revenue was backed out of average rates in the lost revenue calculation?
- 16 A. The total fuel revenue in current rates is \$.018/kWh. Fuel revenue of \$.013/kWh was
- 17 originally defined in the Company's Case No. 99-105-EL-EFC and later increased by
- 18 \$.005/kWh in the Rate Stabilization Period Case No. 05-276-EL-AIR.

19 V. CUSTOMER IMPACTS OF PROPOSED CCEM INFRASTRUCTURE 20 RIDER AND ENERGY EFFICIENCY RIDERS

Q. The other Ohio electric utilities included a form of base rate or fuel increase in their
 Electric Security Plan (ESP) filings. As a point of clarity, is DP&L proposing any
 base rate or fuel adjustments as part of this filing?

1A.No. The Company's base rates will follow the current Rate Stabilization Plan (RSP)2through 2010 and there is no new base rate or fuel customer impact that result from this3filing. However, Company witness Seger-Lawson sponsors a deferral of certain fuel4costs. The customer rate impacts in this case result from the cost recovery for mandated5energy efficiency plans and infrastructure modernization investments necessary to meet6energy efficiency targets.

Q. Will customers be able to reduce their electric bills with DP&L's proposed programs?

9 Α. Yes. CCEM is an integrated infrastructure improvement and energy efficiency program. 10 The combination of infrastructure improvements and energy efficiency programs will enable customers to reduce their DP&L bills significantly. Those customers who 11 12 participate in the most programs will save the most money. In fact, a typical residential 13 customer who participates in all available programs could save as much as 20% on their 14 electric bill. It is important to emphasize that without the infrastructure improvements, 15 the energy efficiency programs could not be offered on a wide scale, they could not be 16 operated effectively nor could their impact be measured and verified. Therefore, no 17 savings are likely without the complete implementation of both the Infrastructure 18 Investment (II) and Energy Efficiency (EE) programs because they could not effectively 19 function independently. When we refer to II or EE programs we refer to the integrated 20 programs and jointly consider their impact.

21 Q. Can you give an overview of the CCEM Infrastructure and Energy Efficiency
22 riders?

1 A. Yes. Both the CCEM Infrastructure Investment (IIR) and Energy Efficiency (EER) riders 2 are cost recovery mechanisms; each is separate and intended to recover a specific cost 3 structure. The IIR is reflective of the specific cost characteristics of the CCEM 4 Infrastructure Investment which contains the AMI (metering) system, Smart Grid and 5 new billing system costs. The metering and billing systems are customer-related costs 6 and their proposed recovery is through a customer-based charge. The remaining II costs 7 are associated with the more efficient delivery of energy and they are recovered on an 8 energy (kWh) basis. The costs recovered by the EER are entirely dedicated to the more 9 efficient use of energy by all DP&L users and the proposed recovery is through an 10 energy-based (kWh) charge.

Q. From what perspective are you presenting the customer impacts of the proposed II
and EE riders?

A. The traditional perspective of a typical customer impact is not descriptive of these
programs. The key perspective is that of a program participant versus a non-participant.
For the residential class, the contrast between participating customers and nonparticipating customers can be made at typical consumption levels (750 & 1,000 kWh).
To represent the residential heating class I used 1,500 kWh, and for the C&I classes I
selected representative customers, which have usage characteristics reflective of the class.

19

Q. Are there other factors that complicate the customer impact illustration?

A. Yes. DP&L is currently operating under its Rate Stabilization Plan (RSP) that ends in
21 2010. The Company's analysis assumes that rates will remain about the same through
22 2010, with two known changes. First, the residential generation discount will expire
23 December 31, 2008, and second, the Environment Investment Rider (EIR) will change in

1		January 2009 and in January 2010. When the RSP expires in 2010, the expectation is that
2	2	standard offer rate structures could change significantly and the new structure is not
3	3	known at this time. Therefore, this analysis assumes that the current rate structures
4	L	remain in place through the seven-year project horizon and that all rates other than IIR
5	5	and EER increase at 3.25% per year (beyond 2010) to reflect the impact of inflation. The
6	5	IIR components will remain constant while the EER will be reflective of program costs
7	7	and is expected to follow the projections found on Schedule E-2.
8	3 Q.	What is the impact of the IIR and EER on a participating customer versus a non-
9	9	participating customer?
10) A.	Table A lists the level of monthly savings that a participating customer would carn versus
10 11) A.	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and
1(11 12	D A. I 2	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating
10 11 12 13	D A. L 2 3	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating customer receives the benefits of the modernized infrastructure and takes part in all EE
10 11 12 13 14	D A. L 2 3 4	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating customer receives the benefits of the modernized infrastructure and takes part in all EE programs applicable to them and that a non-participating customer does not receive the
1(11 12 13 14 15	D A. 1 2 3 4 5	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating customer receives the benefits of the modernized infrastructure and takes part in all EE programs applicable to them and that a non-participating customer does not receive the direct benefits of the modernized infrastructure and take part in any of the EE
10 11 12 13 14 15 16	D A. L 2 3 4 5 6	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating customer receives the benefits of the modernized infrastructure and takes part in all EE programs applicable to them and that a non-participating customer does not receive the direct benefits of the modernized infrastructure and take part in any of the EE programs. In each case, participating customers lower their energy costs through the
10 11 12 13 14 15 10 10	D A. L 2 3 4 5 6 7	Table A lists the level of monthly savings that a participating customer would earn versus those of a non-participating customer, assuming that both categories pay the IIR and EER. These comparisons are based on 2009 rates, and assume that a participating customer receives the benefits of the modernized infrastructure and takes part in all EE programs applicable to them and that a non-participating customer does not receive the direct benefits of the modernized infrastructure and does not take part in any of the EE programs. In each case, participating customers lower their energy costs through the modernized infrastructure (AMI, billing and Smart Grid) and by taking advantage of EE

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		Table A		
EE	Program Parti	cipant vs Non P	articipant Savin	igs
Description	Non Participant	Participant	Difference	Percent
Residential:				····
750 kWh	\$92.67	\$78.80	(\$13.87)	-14 .97%
1,000 kWh	\$117.45	\$101.29	(\$16.16)	-13.76%
Resi Heat (s) 1,500 kWh	\$166.61	\$142.47	(\$24.14)	-14.49%
Resi Heat (w) 1,500 kWh	\$147.67	\$129.68	(\$17.99)	-12.18%
Secondary Single Phase	\$228.03	\$177.59	(\$50.44)	-22.12%
Secondary Three Phase	\$2,869.01	\$2,607.24	(\$261.77)	-9.12%
Schools	\$4,359.51	\$4,123.05	(\$236.46)	-5.42%
Primary	\$14,954.49	\$14,016.42	(\$938.07)	-6.27%

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3 Q. Can you compare the current bill that a customer would receive to the bill that a 4 customer who participates in the EE programs would receive?

A. Yes. Table B compares bills for a customer who participates in the EE programs and
receives the benefits of the infrastructure investment to the current bill for that customer.
Residential and C&I Single Phase, Three Phase and Primary customers are significantly
better off with EE programs than without. Some of the largest customers are already
involved with their own EE programs, and may participate in DP&L's programs. Large
C&I customers (Primary-Substation and High Voltage) each have unique consumption

characteristics and they would have to be evaluated on a case-by-case basis to assess

program impacts, so I have excluded them from the table.

	Table B EE Program Participant Savings vs No EE Programs Implemented				
EE Progra					
Description	Participant With EE	No Programs Implemented	Difference (Savings)	Percent	
Residential: 750 kWh 1,000 kWh	\$78.80 \$101.29	\$87.18 \$111.20	(\$8.38) (\$9.91)	-9.61% -8.91%	
Resi Heat (s) 1,500 kWh	\$142.47	\$158.86	(\$16.39)	-10.32%	
Resi Heat (w) 1,500 kWh	\$129.68	\$139.92	(\$10.24)	-7.32%	
Secondary Single Phase	\$177.59	\$210.41	(\$32.82)	-15.60%	
Secondary Three Phase	\$2,607.24	\$2,765.97	(\$158.73)	-5.74%	
Schools	\$4,123.05	\$4,216.48	(\$93.43)	-2.22%	
Primary	\$14,016.42	\$14,341.16	(\$324.74)	-2.26%	

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4 Q. Can you describe the impact of EE programs through 2015?

A. Yes. The savings grow about 20% over the period because the IIR is fixed throughout
the period while the EER increases to keep pace with program expenditures. All other
rates and charges are assumed to grow at 3.25% to account for the cost of inflation.
Participants will continue to see savings during the period 2009 - 2015. Graphs 1 - 8
show the savings that participating customers can expect versus the situation of those
customers who do not participate.





John B. Wagner, Jr. Page 14 of 19



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Q.

Are customers better off by participating in the Company's proposed EE programs?

3 Α. Yes. Customers will have the ability to control their energy costs by participating in the Company's EE programs. In order to maximize savings, customers need to participate in 4 5 as many programs as possible and maintain that participation year after year. The range of programs is wide enough that every customer should be able to participate in some of 6 7 the programs and gain an opportunity to save. Rate structures may change during the period but such change should not significantly change the customers' opportunity to 8 9 save on their bills. In fact, new rate structures will offer customers new opportunities to save. The key for customers is to participate in as many programs as possible and to keep 10 participating to secure lower energy costs in the future. 11

12 Q. What do Schedules E-4 and E-5 represent?

13 Α. Both Schedules contain bill comparisons using 2009 rates. Each tariff class is 14 represented on a separate page to show the total 2009 bill impact of the proposed IIR and 15 EER rate by various customer usage levels. Typically bill comparisons present a before and after assessment of bills under existing and proposed rates based on usage. In this 16 17 case the "after" rate impact depends not only on the proposed rates and usage but also on the level of customer participation in EE programs. Thus to better describe the potential 18 19 impact on customers' bills, I am presenting two schedules. Schedule E-4 compares 20 participating customers versus non-participating customers with the EER and IIR 21 included (in other words with the Company's proposed programs implemented). Primary 22 substation and transmission level customers are not included because there is no "typical" 23 application of the proposed EE programs for these large customers, but a comparison

would have to consider the individual usage characteristics of specific customers.
 Schedule E-5 is a comparison between the current rates without riders versus the current
 rates with riders and no customer participation. (This comparison was made for all
 customer classes).

5 VI. CONCLUSION

6 Q. Please summarize your testimony.

7 Α. In summary, DP&L will be offering a suite of new rates that give customers more control 8 over their bills. These new offerings will go hand-in-hand with the proposed AMI and 9 billing system that will facilitate the delivery of these new pricing options. The proposed 10 rates could not be made available on a wide scale without the AMI and billing systems. 11 The TOU, CPP and PTR programs will form the foundation of the Company's new 12 pricing options. These rates will reflect PJM price structures where possible to align the 13 price signals that DP&L sends to customers with market costs. The Company anticipates 14 that more options will be developed as new pricing concepts evolve in the market and as 15 customers demonstrate their needs and preferences for new pricing options.

16 The proposed Infrastructure Investment and Energy Efficiency programs will facilitate 17 new pricing options as well as offer customers opportunities to control further their 18 energy usage. Customer impact is positive with participation being key to saving and 19 maintaining that participation is the key to long-term savings. Customers will be better 20 off with the proposed CCEM systems and programs. Participating customers will save 21 money when compared with non-participating customers or when compared to rates 22 without II and EE systems. Savings will grow over the life of the program making it 23 more attractive for customers to participate. The combined capabilities of the AMI

system and the new billing system greatly expand the pricing options available to the
 customer and the Company intends to fully utilize these capabilities to offer innovative
 rates.

4 Q. Does this conclude your direct testimony?

5 A. Yes, it does.

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Please state your name, address and occupation.

My name is John B. Wagner, Jr. I am the Manager, Retail Pricing for the Dayton Power & Light Company (DP&L), 1065 Woodman drive, Dayton, OH. I am responsible for the administration and design of the Company's retail rates. I have been providing rate design, pricing, costing, energy efficiency and load research services for the past thirty years. I have appeared in several jurisdictions throughout the country. Page three of this exhibit lists my expert witness appearances.

I have served as an instructor for pricing and costing courses sponsored by the Electric Council of New England (ECNE), the American Public Gas Association (APGA) and INFOCAST.

Working with clients throughout the country, I have assisted in the establishment of energy efficiency programs and load research programs, developing methods for applying out of period and borrowed data for program evaluation and rate design. I have also worked with energy suppliers, local governments and community groups to retain key accounts as utility customers and local employers.

In 1976, I received my B.S. degree in Business Administration (concentrating in Accounting & Economics) from the University of South Carolina. That same year, I joined the firm of Gilbert Associates in the Cost and Load Analysis department as a Management Consultant. For the next eight years, I worked on accounting cost allocation projects, marginal cost studies, load research assignments and load management programs. During that period, I advanced to the level of Senior Consultant and Project Manager. In July of 1984, I left Gilbert to join the firm of Management Applications Consulting, Inc. (MAC) as a Principal and corporate Vice President. At MAC for the next 20 years I engaged in various regulatory projects supporting pricing and costing assignments with direct testimony. Prior to leaving MAC in 2005 I assumed the position of Chief Financial Officer of the Corporation.

I left MAC in 2005 to take the position of Director, Regulatory Services for the Southern Maryland Electric Cooperative (SMECO). While at SMECO I was responsible for developing and delivering the Company's regulatory strategy.

In 2006, I left SMECO to become an independent regulatory consultant providing expert testimony on a variety of rate and regulatory issues for both utility organizations and consumers.

I joined DP&L as Manager, Retail Pricing in March of this year. Since joining DP&L I have been involved with the Company's Customer Conservation and Energy Management project as well as rate administration and rate design.

EXHIBIT JBW-1

APPEARANCES AS EXPERT WITNESS JOHN B. WAGNER, JR.

<u>Jurisdiction</u>	<u>Docket</u>	<u>Company</u>	<u>Year</u>	Description
Maine PUC	2005-534	Bangor Hydro- Electric Company	2005	Redesign of Demand Rates
Maine PUC	01-245	Bangor Hydro- electric Company	2002	Stranded Cost Recovery in Fixed and Variable Charges and Rate Design
Maine PUC	01-245	Maine Public Service Company	2002	Stranded Cost Recovery in Fixed and Variable Charges and Rate Design
City of South River, NJ City Counsel		South River Municipal Utility	1 999	Strategic Utility Plan
Maine PUC	98-577	Maine Public Service company	1999	Restructuring and Rate Unbundling, Marginal Cost, Embedded Cost and Rate Design
Maine PUC	97-59 6	Bangor Hydro- Electric	1998	Restructuring and Rate Unbundling, Marginal Cost, Embedded Cost and Rate Design
City of Vineland, NJ City Counsel		Vineland Municipal Utility	1 996	Large Customer Retention
City of Vineland, NJ City Counsel		Vineland Municipal Utility	1994	Economic Development
City of Vineland, NJ City Counsel	د هن خشت ک	Vineland Municipal Utility	1993	Revenue Requirements, Cost of Service, Marginal Cost, Rate Design, POD
City of Norwich, CT Board of Public Utilities		Norwich Public Utilities	1993	Revenue Requirements, Cost Allocation, Marginal Cost, Rates
Maine PUC	91-168	Bangor Hydro- Electric Company	1991	Probability of Dispatch, Marginal Cost and Embedded Cost, Backup and Maintenance Rates
Maine PUC	89-68	Central Maine Power	1990	Probability of Dispatch
City of Vineland, NJ City Council	*******	Vineland Municipal Utility	1989	Revenue Requirements, Cost of Service, Marginal Cost, Rate Design, POD
City of Vineland, NJ City Council		Vineland Municipal Utility	1988	Time of Day and Interruptible Rates
City of Denton, TX Utility Board, City Council	ور شیر ا لشند و چنج	Denton Public Utiliti c s	1986	Water & Electric Revenue Requirements, Cost of Service, Rate Design, POD
Maine PUC	85-20 9	Bangor Hydro- Electric	1986	Marginal Cost
Ingahm County, Michigan Circuit Court	79-22776- CZ	Lansing Board of Water & Light	1983	Electric Rate Design and Customer Classification
City of Denton, TX Utility Board, City Council		Denton Public Utilities	1983	Revenue Requirements, Cost of Service, Rate Design
City of Vineland, NJ City Council		Municipal Electric Utility	1981	Revenue Requirements, Cost of Service, Rate Design, POD
Borough of Wyomissing, PA, Borough Council		Water Department	1980	Revenue Requirements and Rate Design

EXHIBIT JBW-2 Original Sheet No. B8 Page 1 of 2

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE RESIDENTIAL TIME OF USE

DESCRIPTION OF SERVICE:

This Tariff Sheet provides the Residential Customer with Time of Use (TOU) Bundled Electric Service from the Company that will be metered and billed in designated peak and off-peak periods.

APPLICABLE:

The program is available to all single-phase residences, single apartments, and churches whose entire requirements are measured through one meter, for lighting, the operation of appliances, and incidental power. Service to more than one dwelling unit served through a single meter shall not be billed on this Rate Schedule. In order to take TOU Service the Customer must have Advanced Metering Infrastructure (AMI) installed on its premise.

REQUIRED SERVICES:

Customers taking Bundled Electric Service under this Tariff Sheet shall pay all charges listed below. The rates contained in this tariff sheet include transmission, ancillary, distribution, and generation service.

<i>.</i>	
1	

RATE PER MONTH:

Customer Charge:

Energy Charges:

<u>Summer</u>

Winter

On-Peak Off-Peak

DETERMINATION OF ON PEAK AND OFF-PEAK USAGE:

On peak hours for billing purposes are in the months of June to September inclusive during the hours of 1 p.m. to 9 p.m. local time, Mondays to Fridays inclusive except New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. All other hours are off peak.

Filed pursuant to the Opinion and Order in Case No. 08-1094 -EL-SSO dated	, 2008 of the
Public Utilities Commission of Ohio.	

Issued _____, 2008

Effective _____, 2010

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE RESIDENTIAL TIME OF USE

MINIMUM CHARGE:

The minimum charge shall be the Customer Charge.

ADDITIONAL RIDERS:

List all riders that are not already included in rates above Customer Conservation and Energy Management Programs Rider on Sheet No. D37

TERM OF CONTRACT:

The Term of Contract shall be for a minimum period of one (1) year, or longer.

RULES AND REGULATIONS:

All Bundled Service of the Company is rendered under and subject to the Rules and Regulations contained in this Schedule and any terms and conditions set forth in any Service Agreement between the Company and the Customer.

Filed pursuant to the Opinion and Order in Case No. 08-1094 -EL-SSO dated	, 2008 of the
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EXHIBIT JBW-3 Original Sheet No. B10 Page 1 of 2

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE COMMERCIAL AND INDUSTRIAL TIME OF USE

DESCRIPTION OF SERVICE:

This Tariff Sheet provides the Residential Heating Customer with Time of Use (TOU) Bundled Electric Service from the Company that will be metered and billed on a time-differentiated peak and off-peak periods.

APPLICABLE:

The program is available to all single-phase residences, single apartments, and churches whose entire requirements are measured through one meter, for lighting, the operation of appliances, and incidental power. In order to take TOU Service the Customer must have an Advanced Metering Infrastructure (AMI) installed on its premise.

REQUIRED SERVICES:

Customers taking Bundled Electric Service under this Tariff Sheet shall pay all charges listed below. The rates contained in this tariff sheet include transmission, ancillary, distribution, and generation service.

—

RATE PER MONTH:

Customer Charge:

Energy Charges:

Summer

Winter

On-Peak Off-Peak

Demand Charge

DETERMINATION OF ON PEAK AND OFF-PEAK USAGE:

On peak hours for billing purposes are in the months of June to September inclusive during the hours of 1 p.m. to 9 p.m. local time, Mondays to Fridays inclusive except New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. All other hours are off peak.

Filed pursuant to the Opinion and Order in Case No. 08- 1094 -EL-SSO dated	_, 2008 of the
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Effective _____, 2010

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE COMMERCIAL AND INDUSTRIAL TIME OF USE

MINIMUM CHARGE: The minimum charge shall be the Customer Charge.

ADDITIONAL RIDERS:

List all riders that are not already included in rates above Customer Conservation and Energy Management Programs Rider on Sheet No. D37

TERM OF CONTRACT:

The Term of Contract shall be for a minimum period of one (1) year, or longer.

RULES AND REGULATIONS:

All Bundled Service of the Company is rendered under and subject to the Rules and Regulations contained in this Schedule and any terms and conditions set forth in any Service Agreement between the Company and the Customer.

DEMAND CHARGE DESCRIPTION:

(Same as current demand charge)

Filed pursuant to the Opinion and Order in Case No. 08-1094 -EL-SSO dated _____, 2008 of the Public Utilities Commission of Ohio.

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Effective _____, 2010

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE COMMERCIAL AND INDUSTRIAL CRITICAL PEAK PRICING

DESCRIPTION OF SERVICE:

This Tariff Sheet provides the Commercial and Industrial Customer with Critical Peak Pricing (CPP) Bundled Electric Service from the Company that will be metered and billed on timedifferentiated peak, off-peak, and critical peak periods.

APPLICABLE:

The program is available to all single-phase residences, single apartments, and churches whose entire requirements are measured through one meter, for lighting, the operation of appliances, and incidental power. In order to take TOU Service the Customer must have an Advanced Metering Infrastructure (AMI) installed on its premise.

REQUIRED SERVICES:

Customers taking Bundled Electric Service under this Tariff Sheet shall pay all charges listed below. The rates contained in this tariff sheet include transmission, ancillary, distribution, and generation service.

-	
1	

RATE PER MONTH:

Customer Charge:

Energy Charges:

<u>Summer</u>

Winter

Critical Peak Price On-Peak Off-Peak

Demand Charge

Filed pursuant to the Opinion and Order in Case No. 08-1094-EL-SSO dated	_, 2008 of the
Public Utilities Commission of Ohio.	-

Issued _____, 2008

Effective _____, 2010

P.U.C.O. No. 17 BUNDLED ELECTRIC SERVICE COMMERCIAL AND INDUSTRIAL CRITICAL PEAK PRICING

DETERMINATION OF ON PEAK AND OFF-PEAK USAGE:

On peak hours for billing purposes are in the months of June to September inclusive during the hours of 1 p.m. to 9 p.m. local time, Mondays to Fridays inclusive except New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. All other hours are off peak.

MINIMUM CHARGE:

The minimum charge shall be the Customer Charge.

ADDITIONAL RIDERS:

List all riders that are not already included in rates above Customer Conservation and Energy Management Programs Rider on Sheet No. D37

TERM OF CONTRACT:

The Term of Contract shall be for a minimum period of one (1) year, or longer.

RULES AND REGULATIONS:

All Bundled Service of the Company is rendered under and subject to the Rules and Regulations contained in this Schedule and any terms and conditions set forth in any Service Agreement between the Company and the Customer.

DEMAND CHARGE DESCRIPTION:

(Same as current demand charge)

Filed pursuant to the Opinion and Order in Case No. 08-1094-EL-SSO dated	, 2008 of the
Public Utilities Commission of Ohio.	

Issued _____, 2008

Effective _____, 2010

BEFORE THE

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PUBLIC UTILITIES COMMISSION OF OHIO

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO

BOOK II – Customer Conservation and Energy Management Programs

DIRECT TESTIMONY

OF ROBERT T. ZABORS

□ MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION

- □ RATE BASE
- □ ALLOCATIONS
- **RATE OF RETURN**
- □ RATES AND TARIFFS
- OTHER

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

DIRECT TESTIMONY OF

ROBERT T. ZABORS

ON BEHALF OF THE DAYTON POWER AND LIGHT COMPANY

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INTRODUCTION Ι. 1

Please state your name and business address.

2

3

Q.

Α.

4 2100; Chicago, Illinois. 5 Q. By whom and in what capacity are you employed? 6 A. I am a Director of Bridge Strategy Group LLC, a management consulting firm. 7 Q. Will you describe briefly your educational and business background? 8 A. I graduated from Northwestern University in 1985, and received an MBA from the 9 University of Chicago, with a concentration in Business Economics. I have spent 10 approximately 20 years in management consulting, primarily serving electric and gas 11 utilities on a wide range of strategic and operational issues. Representative engagements 12 include energy efficiency and demand response strategy, corporate and business unit 13 strategy, acquisitions, process improvement, cost reduction, organizational redesign, 14 regulatory strategy, alliances and joint ventures. While at Bridge Strategy Group, I have 15 written articles for industry publications including Public Utilities Fortnightly, Electric 16 Perspectives, Electric Light & Power and Fortnightly Spark. I was a founder of Bridge 17 Strategy Group and have been a consultant with three consulting firms, Renaissance 18 Worldwide, Booz Allen & Hamilton and Planmetrics, Inc. 19 **Q**. Have you previously provided testimony before any state public utilities commission?

My name is Robert T. Zabors. My business address is 1 North Franklin Street, Suite

- A. Yes. I have sponsored testimony before the Kansas State Corporation Commission in
 Docket Number 07-KCPE-1064-ACQ and the Missouri Public Service Commission in
 Case Number EM-2007-0374.
- 4

Q.

What is the purpose of this testimony?

5 A. The purpose of this testimony is to evaluate the suitability of DP&L's suite of energy 6 efficiency and demand response programs to meet program goals, as well as the adequacy 7 of its methodology for developing its programs and deriving the associated penetration 8 rates, incentives, marketing and administrative costs, and energy and demand savings.

9 Q. Are you familiar with the methods that DP&L used to develop its energy efficiency
10 and demand response program portfolio, and to estimate penetration rates, cost,
11 and benefits?

A. Yes. I interviewed DP&L management who developed these programs and estimates, and
 reviewed testimony, exhibits, schedules, work papers and support documents, as well as
 the Energy Efficiency & Demand Response section of DP&L's Customer Conservation
 and Energy Management ("CCEM") filing.

16

II. SUITABILITY OF DP&L'S PROGRAM PORTFOLIO

17 Q. Do you believe that DP&L's suite of programs will benefit its customer base?

18A.Yes, DP&L's programs address the needs of major customer groups: residential, low-19income, commercial, industrial and public authorities. For residential customers, DP&L20has developed a variety of programs that can provide benefits for all customers (e.g.,

21 lighting, time-based programs). These broad-based programs are supplemented by

1 programs that cater to specific segments with potential for significant energy efficiency 2 savings - such as homeowners or landlords through HVAC rebates.

3 Exhibit RTZ A provides an overview of how DP&L intends to meet the needs of each of 4 its core customer segments. One residential group that can receive a substantial relative 5 benefit through participation is low income customers. It is also worth noting that the 6 low-income segment tends to show the greatest elasticity of demand and higher than 7 average participation rates. DP&L's low-income program is comprehensive and 8 consistent with programs offered by other utilities. The program provides weatherization 9 assistance and new appliance rebates for eligible customers, as well as many other 10 aspects, in addition to programs available to all residential customers.

11 The other segments - commercial, industrial and public authority customers - benefit 12 from a range of prescriptive incentives that address the technologies which, on average, 13 consume the most energy, such as lighting, HVAC systems and motors. Due to the 14 variety of energy intensive applications across these segments, DP&L offers the potential 15 for custom rebates to capture opportunities that cannot be adequately addressed in 16 broader-based prescriptive rebates. The result is that customers are better informed and 17 can exercise choice to control their energy usage.

18

Q. Do you see any gaps in DP&L's program set?

19 Α. No, I see no gaps at this point in their program evolution. The only category of programs 20 that DP&L does not offer that are sometimes provided by other utilities is in the area of 21 new construction. DP&L evaluated these programs and determined that at this time these 22 programs are of low relevance to its customers due to the very low growth in its region. 23

DP&L's current programs are all applicable to the majority of the relevant customer
)	1		classes, which is typical for utilities as they launch their energy efficiency and demand
	2		response initiatives. As they move up the learning curve they can develop and deploy
	3		additional programs such as agricultural efficiency audits or the promotion of innovative
	4		new technologies to manage residential plug load.
	5	Q.	Do you believe that DP&L's process for developing energy efficiency and demand
	6		response programs was reasonable?
	7	A.	Yes, DP&L's program development process was reasonable and pragmatic. DP&L
	8		sought to emulate proven programs that have consistently achieved high energy and peak
	9		demand savings in a cost-effective manner.
	10		
	11		Using best practices from around the country is a traditional and proven methodology in
	12		many aspects of utility operations. And in this area, DP&L has effectively leveraged
	13		experiences from other utilities, while also being proactive in identifying new
	14		opportunities. This type of evaluation can identify both proven and innovative programs
	15		and technologies as well as learning from the experience of others.
	16		
	17		DP&L's approach was thorough, including a review of programs from published
	18		assessments of best practices such as those completed by The American Council for an
	19		Energy Efficient Economy (ACEEE), and of program best practices sponsored by the
	20		California Public Utilities Commission and the Energy Trust of Oregon. DP&L also
	2 1		looked at programs implemented by utilities often considered to be leaders in the field
	22		such as Xcel Energy, Northeast Utilities, and Pacific Gas & Electric. In addition, DP&L
	23		management visited Kansas City Power & Light a company of similar size with several

1	years	of program experience, to leverage their experience in launching successful energy
2	efficie	ency and demand response programs.

By conducting market research in its service territory, DP&L was able to confirm that these programs are desired by its customer base.

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Moreover, DP&L met with several vendors to discuss their energy efficiency and demand response offerings, to identify potential program partners, to determine outsourcing options, and to obtain cost estimates for technology-intensive programs such as direct load control.

11

Last, by using the Total Resource Cost ("TRC") test, which considers DP&L-specific
capacity and energy costs, DP&L was able to determine that all selected programs will be
cost-effective in its service territory.

15

16 Q. DP&L used the TRC test to evaluate the cost effectiveness of the Company's

proposed programs. What other tests are commonly used by utilities? What are the
advantages of using TRC?

19 The TRC test evaluates programs as an alternative resource option based on net costs to 20 the customer and utility. The test compares the program benefits of avoided supply costs 21 and avoided T&D costs to program and equipment costs incurred by the utility and the 22 customer. This test is the one most commonly applied by utilities and regulators because 23 it provides a comprehensive evaluation of the complete impact on all direct stakeholders.

- While the TRC is the most prevalent measure of cost effectiveness, four other tests are also used.
 - Participant Test Measures program impact on participants. Benefits to the customer of lower utility bills in addition to customer incentives and tax incentives are compared to costs incurred by the participant. This test does not consider any benefits to or costs incurred by the utility.
- Societal Test The societal cost test is the same as the TRC test, except that it
 also values indirect benefits such as environmental improvements. While this test
 is the most thorough, it is rarely used because of the difficulty of valuing
 externalities, which are frequently intangible.
- Rate Impact Measure (RIM) Measures how a program impacts rates. Benefits
 include avoided supply costs. Costs include incentive and administrative costs
 and lost utility revenues from reduced sales. This test, however, does not reflect
 the cost of purchasing and implementing an efficient technology. Since this test
 doesn't measure the true cost to the customer, it does not fully reflect the value of
 a program.
- Utility cost test (UCT) Measures the change in the amount the utility must
 collect from customers every year to meet earnings targets (e.g., change in
 revenue requirement). Benefits include avoided supply costs. Costs include
 incentive and administrative costs. Similar to the RIM test, the UCT does not
 reflect the cost to customers for implementing a given measure.
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III. PROGRAM VALUATION METHODOLOGY

Q. Do you believe that the methodology that DP&L used to determine energy efficiency
 and demand response program penetration rates is reasonable? If so, why?

A. Yes. DP&L's methodology is reasonable. Using primary market research is a generally
accepted method to estimate program participation. In instances where customer research
was not available, DP&L used industry benchmarks that provide a good perspective on
what is achievable throughout the country and in regions with similar climate
characteristics.

9 Q. How do DP&L's program penetration rates compare with what you have seen in the 10 industry?

11 Α. DP&L's program penetration rates are within industry ranges. For example, I have seen 12 expected uptake of residential CFLs from 60-150 bulbs per 100 customers around the 13 country and DP&L is projecting 131. Similarly, annual participation forecasts for new 14 residential HVAC programs range from 0.2% to 1.3% and DP&L is forecasting 1.3%. 15 For HVAC tune-ups, the range is 0.2% - 1.6% and DP&L is forecasting annual adoption 16 of 1.6%. An important thing to keep in mind around these figures is that there is a 17 significant lag in utility reporting, as well as increasing customer cognizance of issues 18 such as higher energy costs and environmental impact. In addition, strong marketing by 19 retailers, suppliers and a host of intermediaries is promoting evaluation and behavioral 20 change among consumers resulting in increased adoption of efficiency technologies.

Q. DP&L assumes continued growth of the Company's residential lighting program
 after 2012 when the phasing out of incandescent bulbs is mandated by the Energy

Independence and Security Act of 2007 (42 U.S.C. § 6295(i)(1)(B))? In your opinion, is this assumption reasonable?

3 Α. Yes. DP&L stipulates that while the Company will initially focus its residential lighting 4 program on the promotion of CFLs, the Company expects to continue to offer rebates for 5 the most efficient lighting technology available. There is a strong product development 6 pipeline of efficient lighting technology that will be targeted toward the residential setting 7 prior to 2012. To ensure the ongoing success of its residential lighting program, the 8 Company will need to track the viability of new lighting technologies such as LEDs and 9 to work with manufacturers and retailers to ensure that as new technology emerges it is 10 made available to DP&L customers.

Q. Do you believe that the methodology that DP&L used to determine energy efficiency and demand response incentive levels is reasonable? If so, why?

A. Yes, DP&L's methodology is reasonable. Using industry benchmarks and local price
elasticity surveys to determine incentive levels is a proven approach. Given that most of
the incented technologies (e.g., appliances, motors) have similar prices across regions,
DP&L's incentive levels should be similar as well. The exception is Residential HVAC
Diagnostics and Tune-Up, for which costs vary significantly among cities. DP&L's
survey of local HVAC contractors to determine the average price of the service in the
DP&L service area adequately addresses this difference.

Q. Do you believe that the methodology that DP&L used to determine energy efficiency and demand response marketing and administrative costs is reasonable? If so, why?

A. Yes, DP&L's methodology is reasonable. Using performance benchmarks from other
 utilities to determine marketing and administrative costs as a percentage of total incentive

- is an effective planning assumption. Since DP&L has not previously operated these
 programs, benchmarks, supported by site visits and supplier discussions, provide a
 reasonable estimate of the costs to develop and maintain the programs.
- 4 Q. Do you believe that the methodology that DP&L used to determine energy efficiency
- 5 and demand response energy and demand savings is reasonable? If so, why?
- A. Yes, DP&L's methodology is reasonable. The key source of data for DP&L's analysis of
 energy efficiency measures was the Database of Energy Efficiency Resources ("DEER")
 maintained by the California Energy Commission. This database is generally recognized
 as the most comprehensive and consistent database of such measures and is regularly
 updated. Where climate differences might make California data less relevant, DP&L used
 the performance of such programs at utilities in similar climate zones such as other
 utilities in Ohio, Minnesota, and Illinois as the basis for savings calculations.
- Q. Are you familiar with how the energy impacts by program were valued monetarily?
 If so, is the Company's methodology and data reliable?
- A. Yes. The methodology and data are reliable. As stated above, the total energy savings for
 each program were based on reliable industry databases or other utilities' experience.
 DP&L then allocated the saved energy into 24 intervals, on-and-off peak by month,
 allowing the Company to use more precise market price estimates. DP&L's allocation
- 19 methodology was based on end-use load curve data from its customer base and other
- 20 utilities' experience, wherever available.
- Q. Do you believe that the methodology that DP&L used to forecast the peak demand
 impact of time-based pricing is reasonable? If so, why?

- 1 Yes. The most common source of comparison in the industry for time-based rates is the Α. 2 California Statewide Pricing Pilot (SPP). For residential demand savings, the CA SPP showed a 13.1% per participant reduction in peak demand for time-based pricing 3 programs,¹ which is similar to the 13.4% that DP&L estimated. 4 In addition to its residential TOU tariff, DP&L will also offer residential customers peak 5 time rebates (PTR), which DP&L estimates will reduce peak demand by 11.9% per 6 participant; this figure is consistent with results cited by the Anaheim Public Utility PTR 7 8 pilot, the most extensive pilot to date.² 9 In the non-residential segment, DP&L's estimates of 4.9% peak demand savings per 10 participant in TOU are consistent with the results from the CA SPP. Similarly, DP&L's 11 estimates for non-residential critical peak pricing (CPP) of 6.0% are just below the range seen in the CA SPP of 6.1% - 9.1%.³ It is appropriate for DP&L's estimate to fall at the 12 13 low end of the range for CPP as its service territory will probably realize fewer benefits 14 from the program than in California due to lower prices and less public awareness of 15 conservation, and of price and availability risks of peak energy conditions. 16 Q. DP&L does not project any energy savings from time-based pricing. Is this
- 17

inconsistent with common practices?

¹ Residential TOU: CA SPP: Charles River Associates, Impact Evaluation of the California Statewide Pricing Pilot. March 16, 2005.

² Residential PTR: Frank Wolak, Residential Customer Response to Real-Time Pricing: The Anaheim Critical-Peak Pricing Experiment. May 24, 2006.

³Ahmad Faruqui and Stephen George "Quantifying Customer Response to Dynamic Pricing.". *The Electricity Journal* April 27, 2005. Page 61.

1	А.	No. Some utilities have experienced energy savings by implementing time-based pricing
2		while others have not seen any net conservation. DP&L's decision not to project such
3		savings at this time is conservative but reasonable given they have not yet tested the
4		pricing model with their customers or designed a tariff. Nor has a tariff been approved by
5		the commission. As they come closer to being able implement time-based pricing in
6		2011, they may re-evaluate their decision to project energy savings.
7		
8	Q.	Should DP&L have performed a technical and market potential study to ensure that
9		all program options are exhausted and to measure the impact of potential
4.0		
10		programs?
10	A.	No, not at this point. DP&L's energy efficiency and demand response programs include a
10 11 12	A.	No, not at this point. DP&L's energy efficiency and demand response programs include a common, comprehensive set of programs that have been proven throughout the industry.
10 11 12 13	A.	 programs? No, not at this point. DP&L's energy efficiency and demand response programs include a common, comprehensive set of programs that have been proven throughout the industry. The benefit of a technical study to identify potential additional programs would be
10 11 12 13 14	A.	 programs? No, not at this point. DP&L's energy efficiency and demand response programs include a common, comprehensive set of programs that have been proven throughout the industry. The benefit of a technical study to identify potential additional programs would be nominal and would be outweighed by the considerable cost and time required to conduct
10 11 12 13 14 15	A.	 programs? No, not at this point. DP&L's energy efficiency and demand response programs include a common, comprehensive set of programs that have been proven throughout the industry. The benefit of a technical study to identify potential additional programs would be nominal and would be outweighed by the considerable cost and time required to conduct it. At this stage, DP&L and its customers would be better off using funds directly for
10 11 12 13 14 15 16	A.	 programs? No, not at this point. DP&L's energy efficiency and demand response programs include a common, comprehensive set of programs that have been proven throughout the industry. The benefit of a technical study to identify potential additional programs would be nominal and would be outweighed by the considerable cost and time required to conduct it. At this stage, DP&L and its customers would be better off using funds directly for DP&L's programs rather than trying to identify additional, unproven programs.

18

IV. ASSESSMENT OF OUTCOMES

- Q. How do DP&L's estimates for total energy and demand savings from its portfolio of
 energy efficiency and demand response compare with industry experience?
- A. A retrospective review of 20+ utilities with extensive energy efficiency and demand
- 22 response programs in various stages of maturity shows actual energy reduction of up to
- 23 1.9% of sales in 2005 (Exhibit RTZ B-1). Recent utility filings, summarized in Exhibit B-

1 4, show projections of up to 1.8% in the third year of program operation. DP&Ls's three-2 year estimate of energy savings of 1.5% of sales is in line with both data sets. Exhibit 3 RTZ B-4 also shows that in recent regulatory filings, utilities project first year savings of 4 between 0.1% and 0.5%. DP&L's first year estimate of 0.4% seems reasonable given the 5 range. Very mature programs such as PG&E project energy reductions of as much as 6 3.4% of sales by 2011, revealing a potential opportunity for significant growth in 7 program impact as DP&L programs become more mature. 8 Peak demand reduction ranges from 0.03% - 4.0% (Exhibit RTZ B-2). DP&L expects to

be in the middle of the range at 1.5% in three years. Since this study reports data from
2005, one would expect significant upwards pressure on the benchmarks given the
limited set of programs, technology, and customer awareness in 2005.

12 Q. How do DP&L's total program costs compare with industry experience?

13 А. Utilities with meaningful energy efficiency and demand response programs spent 14 anywhere from 0.1% to 3.3% of their annual revenues on efficiency programs in 2005 15 (Exhibit RTZ B-3). Recent regulatory filings (Exhibit RTZ B-5) show that utilities 16 project spending up to 2.3% of revenues in year three of program operations. DP&L's 17 projected costs for year three are 1,4% of revenues, at the middle of the range but greater 18 than most utilities in the survey. It is also worth noting that DP&L has used aggressive 19 but reasonable assumptions regarding ramping up programs over time. Exhibit RTZ B-5 20 illustrates that the Company expects to spend 0.8% of revenue in the first year of its 21 programs which compares favorably to projections by other utilities. Recognizing current 22 market conditions and the targets in S.B. 221, this level of expenditure by DP&L is 23 reasonable and appropriate. I also expect that industry averages for expenditures on

- programs will rise as targets become more pervasive and incremental efficiency savings
 become more difficult to achieve.
- 3 Q. How do the energy and demand targets in S.B. 221 compare to targets set in other
 4 states?

A. Ohio's targets are aggressive relative to some other states in the country. Many states
only set targets for a few years, and, consequently, they have considerably lower targets.
For example, Ohio utilities need to shed nearly one-quarter of their load through energy
efficiency compared with those in Connecticut, whose targets span only a few years and
reach a peak of 4%. While states are increasing their targets, Ohio's targets are among the
highest in the nation today.

11

Q. Given the aggressive targets set by Ohio law, how do you evaluate the suite of programs described in this filing?

14DP&L's energy efficiency and demand response programs are necessary and should be15sufficient to achieve the targets in S.B. 221. While the line losses and dynamic voltage16control associated with DP&L's smart grid initiative will provide some energy and17demand savings, the only way to meet Ohio's aggressive targets is with a comprehensive18suite of demand side management programs, such as those included in the CCEM19portfolio.

Q. To demonstrate that the Company meets S.B. 221 targets, DP&L is claiming energy
 and demand savings from components of the CCEM filing other than energy
 efficiency and demand response programs. Is this appropriate?

I	1	А.	Yes. S.B. 221 provides that "programs implemented by a utility may include demand-
	2		response programs, customer-sited programs, and transmission and distribution
	3		infrastructure improvements that reduce line losses." DP&L's CCEM programs include
	4		four components of energy and demand savings, each of which falls within that
	5		provision. Specifically:
	6		(1) DP&L projects energy and demand sayings from the various customer programs (e.g.,
	ž		(-) 21 002 projects thing your antimate in 229 101 at the formand manager and matematic
	7		residential lignung, time-based pricing), which are both demand-response and customer-
	8		sited programs.
	9		(2) DP&L also projects reduced line losses and demand resulting from dynamic voltage
	10		control associated with its Smart Grid Development Plan.
			•
	11		(3) DP&L projects energy reductions attributable to customer behavioral changes
	12		associated with home energy displays, which are examples of customer-sited programs.
	13		(4) DP&L also projects demand reduction for non-residential customers due to PJM's
	14		Demand Response programs, which rely upon DP&L's AMI infrastructure to
	15		communicate curtailment information and to measure the results of curtailment periods.
		-	
	16	Q.	Do you believe that DP&L's plan for measuring and evaluating the results of its
	17		energy efficiency and demand response programs is prudent and reasonable?
	18	A.	Yes. DP&L's plan to engage, at a future date, a third-party Evaluation, Measurement and
	19		Verification (EM&V) firm via an RFP process to conduct impact evaluations, process
	20		evaluation, verification of program participation, market effect studies, and impact
	21		manually contract of program parasipation, manual entropy and might
	21		evaluations is prudent. In most cases an EM&V firm is brought in after a utility has
	22		between and one and two years of data related to program performance.

 1
 Q. Are DP&L's CCEM programs more favorable in the aggregate than expected

 2
 market rates?

A. Yes, for two reasons. First, DP&L's Total Resource Cost ("TRC") test (sponsored by Mr.
Michaelson) demonstrates that the implementation cost of each component of DP&L's
energy efficiency and demand response programs is less than the market value of the
generation saved. DP&L's program are thus more favorable to customers than expected
market rates, since it will cost less to implement DP&L's programs than it would cost to
acquire the amount of generation saved through the programs.

9 Second, the market has not provided and is not expected to provide the suite of programs 10 that DP&L will offer through its CCEM programs. Only a utility can offer AMI or Smart 11 Grid, so the benefits of those programs cannot be supplied by the market. While some 12 market participants offer some energy-saving products or services (e.g., retailers sell CFL 13 bulbs and certain energy-efficient HVAC systems and appliances), those offerings are not 14 comparable to the offerings in DP&L's CCEM programs. DP&L will offer a suite of 15 programs coupled with an education plan that is designed to increase customer awareness 16 and usage. DP&L's comprehensive Energy Efficiency and Demand Response program 17 that offers a suite of programs and educates consumers about those programs will be 18 much more successful in reducing energy consumption than what exists in the market 19 currently, or what is likely to exist through isolated retailers' offerings of bulbs and 20 appliances. Market participants have not offered a comparable suite of programs and 21 educational plan, and there is no reason to expect that they will do so in the future. 22 Further, DP&L will pay a significant share of the customer's expenses associated with the 23 Energy Efficiency and Demand Response products and services, something that market 24 participants have not done and are not expected to do. DP&L's CCEM programs are thus more favorable than the expected results in the market, since the market has not and is
 not expected to offer a comparable suite of programs.

3

4 V. CONCLUSION

5 Q. Please summarize your testimony.

6 DP&L has developed a comprehensive portfolio of common and proven energy Α. efficiency and demand response programs. The portfolio is relevant to key segments of 7 8 its customer base and was vetted through market research. This market research, in tandem with industry benchmarks, was used to establish penetration estimates. In 9 10 addition, industry benchmarks were used to determine incentive levels, administrative 11 and marketing costs, and energy and demand impact. My review of DP&L's work shows 12 that DP&L's performance estimates are within the range of what I have seen at other 13 utilities, and I believe they are reasonable and attainable. 14 In conclusion, in comparison to centralized generation investments, these programs are lower risk with a local footprint, with investment dollars directly flowing into the pockets 15

16 of Dayton-area residents.

17 Q. Does this conclude your direct testimony?

18 A. Yes, it does.



		omeowners	enters	owincome	mall Non- esidential	arge Non- esidential
Residential Lighting	 Buying down the cost of compact fluores cent light builds ("CFL") at the refail level May expand to energy efficient fixtures as well as other types of efficient lighting. 					
Residential HVAC Diagnostic & Tune-Up	 Customers are offered incentives to have HVAC units tuned up. HVAC technicians are trained in proper refrigerant charge and airflow techniques. 	~	- - 	>	17 28 A. 1 - 28 A.	
Residential HVAC Rebates	 Provides rebates to customers who purchase new energy efficient HVAC units 					
Residentiel Appliance Recycling	 Provides customers with a payment for a working, inefficient window air conditioner or a second refigurator of freezer. Provides for the removal and recycling of these inefficient appliances. 	7	7	7		
Residential Appliance Rebate	 Provides rebetes to customers that purchase qualitying Energy Star freezers, dishwashers, room air conditioning units, denumiditiens and celling farts. 		\mathbf{x}			
Residential Low Income Affordability	 DP&L will fund energy audits for low-income customers. Recommendations from the audit that are found to have a benefit-to-cost ratio better than 1.0 will be directly funded and implemented through this program. 	·		>	τ ^α αργούς του μαζικό ματο Στορογούς του μαζικό ματο	
Residential Time-of-USe Pricing	 Voluntary time-of-use pricing option will be made available to residential customers once sufficient intrastructure is in place. 	~				
Residential Peak Time Rebate Pricing	 Participating customers that reduce their energy consumption during peak periods below a pre- established baseline will receive a rebate from DP&L. 	7	7	?		• •
Residential Direct Load Control	 Provide aligible participants with programmable thermostal installed at no cost in exchange for allowing DP&L to cycle the central air conditioning unit during peak periods. 					
von-Residential Prescriptive Rebates	 Offers incertives for designated commercial and industrial efficiency measures (e.g. efficient lighting, molors and drives, and compressed air systems). As the Compary gains experience with the program and customer needs, the list of prescribed measures with be revised. 				>	~
Non-Residential Oustom Rebates	 Offers incleitives for more complex measures, including industrial process improvements and new building construction. Any cost-effective measure(TRC>1) that improves a customer's electric energy efficiency will be considered for an incentive. Incentive levels will be project-specific and based on prescribed traitablins. 					
Non-Residential Time-of-Use Pricing	 Two time-of-use pricing tarifis will be offered to non-residential customers: basic time-of-use and critical peak proving. Provide allahible barticibants with progremmeble thermoster installed at no cost an exchange, for 				> **	>

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Exhibit RTZ A





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artigo Strategy Greap F.C. 2005



* excludes energy savings from measures installed prior to 2009 source: Regulatory filings, Bridge Strategy analysis Constant Crown (Strawn) (Constant)



0 (1991) (1991)

2002 CONTRACT CONTRACTOR CONTRACTOR

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO CASE NO. 08-1095-EL-ATA CASE NO. 08-1096-EL-AAM CASE NO. 08-1097-EL-UNC

BOOK III- Alternative Energy Plan

CHAPTERS, SCHEDULES, WORKPAPERS

AND DIRECT TESTIMONY

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO

Book III - Alternative Energy Plan

The Dayton Power & Light Company

THE DAYTON POWER AND LIGHT COMPANY

Book III - Alternative Energy Plan

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Chapter 1

Introduction

Over the last few years, a number of states have imposed renewable energy portfolio targets on utilities and non-utility retail providers of electricity. Typically, a set of targets is established that grows over time and mandates that a designated percentage of an overall portfolio of electricity be generated from a renewable resource. What qualifies as a "renewable resource" varies from state to state but, at a minimum, would include solar, wind, geothermal, and small hydropower facilities, and may also include larger hydropower facilities, electricity generated using gas from landfills, municipal or agricultural waste or crops, or combustion of waste. Various programs have been developed by entities including the PJM Interconnection, LLC ("PJM") with its Generation Attribute Tracking System ("GATS") and the Mid-West Independent Transmission System Operator ("MISO") with its Midwest Renewable Energy Tracking System ("MRETS") to track ownership of the renewable attributes. Other organizations have developed processes to certify the facility's output as renewable.

Ohio Senate Bill 221 ("SB 221") imposes a set of alternative energy targets for each of the years 2009-2025 that measure compliance based on the number of kilowatthours (kWh) within the total portfolio of kWh provided to customers. SB 221 contains two elements that, if not unique, are not standard within the legislation in other states. First, the renewable portfolio target may be limited to the extent that obtaining electricity from such sources would increase costs to customers by 3%. Second, in addition to the renewable portfolio standards, SB 221 establishes targets to implement advanced energy programs, which are defined to include energy efficiency and conservation programs.

Because the first set of targets is effective beginning in 2009, less than a year after enactment of SB 221 and, in all likelihood, well before any significant new renewable projects could be planned, constructed and placed into service, this Compliance Plan reflects the steps that can be taken almost immediately after PUCO approval in order to comply with the near-term targets for 2009-2010. In the mid-term (2011-2013), the Compliance Plan reflects a greater reliance on newly-constructed projects. The Compliance Plan over the longer term is designed to establish the framework for longerterm compliance.

Chapter 2

A. <u>Statutory Provisions</u>

1. Overall Target

SB 221 establishes a target that by 2025, a total of 25% of the electricity provided to retail customers will be from a combination of advanced energy projects and renewable energy resources.

Advanced energy resources are defined to include improved efficiencies at power plants if achieved without additional carbon dioxide emissions, distributed generation systems providing electricity and thermal output, clean coal technologies, advanced nuclear energy, fuel cells, advanced solid waste or construction and demolition debris conversion technology that results in measurable greenhouse gas emissions reductions, and demand-side management and energy efficiency improvements. Unlike the renewable energy targets, which include annual targets beginning in 2009 that grow toward a final 2025 target, there are no specified interim targets required to be met for the advanced energy portion of the 2025 overall target of 25%.

Renewable energy resources are defined to include solar photovoltaic or solar thermal energy, wind energy, energy produced by a hydroelectric facility, geothermal energy, fuel derived from solid wastes through fractionation, biological decomposition, or other process that does not principally involve combustion, biomass energy, biologically derived methane gas, or energy derived from nontreated by-products of the pulping or wood manufacturing process and fuel cells.

2. Renewable Target

SB 221 establishes the following targets for renewable energy resources as a percentage of the electricity supplied to retail customers. These percentage targets apply to an electric distribution utility as well as a Competitive Retail Electricity Service ("CRES") Provider.

`. <i>.</i>	Renewable Energy	
By End of Year	Resources (includes the Solar Energy Target)	Solar Energy Target
2009	0.25%	0.004%
2010	0.50%	0.01%
2011	1.00%	0.03%
2012	1.50%	0.06%
2013	2.00%	0.09%
2014	2.50%	0.12%
2015	3.50%	0.15%
2016	4.50%	0.18%
2017	5.50%	0.22%
2018	6.50%	0.26%
2019	7.50%	0.30%
2020	8.50%	0.34%
2021	9.50%	0.38%
2022	10.50%	0.42%
2023	11.50%	0.46%
2024 and each calendar year thereafter	12.50%	0.50%

It is not necessary to own the renewable energy resource or to have a power purchase agreement ("PPA") with the owner of a renewable energy resource. Pursuant to PUCO proposed rule 4901:1-40-04 (D), compliance can be demonstrated through the purchase of Renewable Energy Credits ("RECs").

At least one-half of the renewable energy resources percentage must be from sources within Ohio. The remaining target can be from sources outside Ohio but must be

deliverable to Ohio. There is no target specific to a geographic location, i.e., DP&L could meet its target by buying renewable energy or RECs from sources located throughout Ohio or elsewhere and is not required to have projects sited within DP&L's service territory.

Failure to meet the targets triggers penalties that are expressly prohibited from being passed through to customers. Targets can be adjusted by the PUCO upon certain findings regarding unavailability of sufficient resources or due to price levels that would exceed a 3% level set forth in SB 221.

B. <u>DP&L and DPLER Targets</u>

In order to apply the statutory targets to the Company, assumptions had to be made regarding retail sales and the participation of CRES Providers within DP&L's service territory.

In summary, DP&L and DPLER load was analyzed together, eliminating the need to make multiple assumptions as to the whether or not DPLER customers will return to DP&L over time. Given the relatively small amount of non-affiliated CRES provider activity to date, and to be conservative, the renewable targets were applied with respect to 100% of the retail sales within DP&L's service territory.

Additionally, because retail sales estimates are increasingly less reliable in outyears, estimated targets were made only through 2010.

DP&L targets for alternative energy were computed based on the weatheradjusted average retail sales for the period 2006-2008, adjusted for major one-time events (e.g., gain or loss of one or more major customers). The following are DP&L's targets (in MWh) for the first two years covered by the legislation:

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	<u>2009</u>	<u>2010</u>
Renewable Energy Target	37,444	74,129
Ohio Sited Portion of R.E. Target	18,722	37,065
Solar Energy Target	599	1, 483

These targets are slightly lower than targets reflected in DP&L's July 25, 2008

Request for Proposals ("RFP"), and represent a more refined estimate developed after the

RFP was issued.

Chapter 3

Compliance Plan

A. <u>General Overview and Considerations</u>

The Compliance Plan is in three phases to reflect three different time periods: the near-term (2009-2010), the mid-term (2011-2013), and the longer-term (2014-2025).

Given the relatively brief time between enactment of SB 221 and the implementation of a renewable energy target and solar energy target beginning in 2009, DP&L's foundation for compliance in 2009 and 2010 is expected to be the acquisition of RECs. For the remainder of 2008 and for 2009-10, DP&L will pursue opportunities to construct new renewable resources, to buy renewable resources, or to enter into PPAs for renewable energy and associated RECs. However, RECs may be purchased to the extent necessary to fill any gap up to the target level.

RECs would be obtained in one of two ways. First, and as discussed in greater detail below, on July 25, 2008, DP&L issued an RFP seeking proposals to meet DP&L's alternative energy targets, including the purchase of RECs. Second, there is a secondary market where RECs are freely bought and sold at market prices.

If RECs are purchased, DP&L intends to purchase them based primarily on two considerations: qualification toward the target level and price. As explained in greater detail in DP&L Witness Stephenson's testimony, DP&L urges the Commission to recognize that RECs are often sold separately from the electric generation, that RECs are certificates that document an ownership right, and that RECs are "deliverable" to Ohio through the mail, facsimile or computer, rather than via interstate electric transmission lines. As a result, the criteria for a REC to qualify toward the target level should be that

it originates from a facility that was placed in service after January 1, 1998, that operates using a technology included in the list of qualifying technologies, and is interconnected to a utility that is connected to the interstate transmission system. DP&L does not believe that SB 221 incorporates a separate "deliverable to the state" requirement for RECs.

Irrespective of how the PUCO rules on that threshold question, DP&L intends to purchase one half of its RECs from facilities sited in Ohio and the remainder from either Ohio sited facilities or facilities sited elsewhere in the United States, with a preference given to RECs from facilities sited in Ohio and adjacent states provided that the cost of such RECs are equivalent to the costs of RECs that may be purchased elsewhere. How the PUCO rules on that threshold question, however, will be determinative of whether DP&L will be able to access national markets for RECs or will buy RECs regionally regardless of the price differentials. Unless otherwise excluded, all REC purchases and other costs incurred to comply with the renewable resource targets will be subject to the 3% rate cap outlined in section 4928.64(C)(3) of the ORC.

The foundation for compliance during the mid-term (2011-2013) is expected to include a combination of PPAs and new construction, some of which may be owned by DP&L. Some projects are expected to be identified through the RFP or through subsequent RFPs that may be issued. Other projects are expected to be identified by DP&L as potential opportunities or brought to DP&L by project developers looking for project financing or joint venture arrangements. Again, RECs may be purchased to fill in any gap between the amount of renewable energy obtained in these ways and the target level.

Energy purchases will be from resources that can be shown to be deliverable to DP&L's service territory. As proposed by DP&L in case number 08-888-EL-ORD, DP&L believes the statutory phrase "can be shown to be deliverable into this state" means that the electricity originates from a facility that is interconnected to electric distribution and transmission systems such that the electricity from such a facility could be transmitted into this state, but with no requirement that potentially expensive transmission agreements be executed to actually create a contract path for actual deliveries into the state. With respect to the requisite "showing," DP&L has also urged the Commission to find that any electricity from a facility sited in Ohio, a contiguous state, or interconnected with an electric transmission company that is a member of PJM or MISO shall be deemed to be "deliverable into this state." For facilities sited elsewhere, the showing that would be required is that there are interconnections through which power from such a facility could be delivered into this state pursuant to one or more transmission agreements, but it should not be required that transmission agreements actually be executed.

The experience gained in the near and mid-term will be employed to meet the longer-term renewable targets. At this time, DP&L does not believe that it is appropriate or possible to develop the details for the longer-term. The RFP that has been issued permits prospective sellers to make proposals to sell renewable energy for periods ranging from 3 years to 20 years. It is uncertain at this time, however, whether there will be a significant number of economically viable offers presented and for what durations. If, for example, there are significant numbers of renewable projects offered for 20-year terms, that would greatly influence the shape and scope of future plans to meet the

longer-term targets. This approach is also consistent with the inherent uncertainty that exists with respect to the renewable energy markets that are still in the early stages of development. The Ohio targets are aggressive and potentially subject to limitations based on costs and future availability of supply. These uncertainties make it impractical to attempt to now develop the details for compliance over the longer term.

There are no specific annual targets for Advanced Energy Resources. However, targets do exist for energy efficiency. Moreover, the definition of Advanced Energy Resources includes energy efficiency and demand response programs as outlined in division (A)(34)(g) of section 4928.01 of the Revised Code.

As detailed in other portions of this filing, DP&L has a very extensive plan to implement Customer Conservation and Energy Management Programs ("CCEM") that are centered around energy efficiency and demand response programs. Some or a significant amount of the advanced energy target may be met through implementation of DP&L's CCEM. In the event that DP&L may over-comply with the 2025 renewable target, that overcompliance would also help meet the overall 2025 advanced energy target. In addition, DP&L will look for opportunities to invest in advanced energy technology, including opportunities to participate in joint ventures or other forms of coownership arrangements for advanced energy resources.

During the planning and execution process of the near and mid-term portions of the Compliance Plan, DP&L will attempt to comply with section 4928.64(B)(3) of the ORC to purchase RECs from Ohio resources, which will further advance the State objective to support public and private job creation and retention.

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B. <u>Request for Proposals</u>

1. Issuance and Approach to Evaluation

In order to explore the lowest reasonable cost options to comply with the Renewable Energy Resources target, DP&L issued an RFP on July 25, 2008. The information was distributed via a press release with a link to the RFP. The press release was distributed to nationally known media outlet, Business Wire, and in accordance with DPL procedures for sending all news releases, including financial news releases subject to financial disclosure requirements. Releases sent through Business Wire are distributed to all major news outlets including 6000 websites, search engines, and databases, and traditional media outlets such as Bloomberg, Dow Jones, and the Associated Press.

The news release was posted on DPL's website and referenced a link to the complete RFP. In addition the link to the RFP was made available on DP&L's website (<u>http://www.dpandl.com</u>), as well as parent company DPL's homepage (<u>http://dplinc.com</u>). Research through publicly accessible databases and websites was undertaken to develop a mailing list of approximately 250 companies that are active in the renewable energy area, and each was sent a copy of the RFP. The RFP is also promulgated on various publicly accessible DP&L links. The deadline for responses to the RFP was September 12, 2008. The RFP is included here as Exhibit 1.

In summary, the RFP sought proposals across a broad array of alternative approaches, with the single common element that the proposal had to involve a resource that qualified as renewable under SB 221. Beyond that constraint, however, the RFP was developed to maximize the potential number of bidders.

The RFP specified that:

"Bid proposals may be in the form of:

- a. Power Purchase Agreement (energy plus associated RECs and may, but does not necessarily, include capacity and other ancillary services)
- b. Power Purchase Agreement with a buyout option
- c. Turnkey Construction Project (including the transfer of all rights to RECs)
- d. Sale and Purchase Agreement for RECs on a stand-alone basis (no energy, capacity, or other products)
- e. Any combination of the above."

The RFP requested proposals to purchase renewable energy or RECs for periods of time ranging from 3 years to 20 years. It requested proposals for turnkey operations under which DP&L would become the owner. While bidders were encouraged to present bids in the form of a MWh proposal that corresponds to the targets in SB 221, bidders were permitted to offer proposals on a MW basis. A preference was noted in the RFP for projects sited in Ohio, but projects outside of Ohio will also be considered. A preference was also expressed for projects that could be placed in service before the end of 2010, but again, that point was expressed as a preference and not as a requirement that would exclude alternatives with longer lead times.

DP&L is in the process of developing a method to compare energy sales offers that may involve varying terms, different combinations of capacity, energy, RECs, and ancillary services, and to reflect varying degrees of capacity factor risk (e.g., wind and solar energy will have much lower capacity factors than geothermal or biomass digestion). Additional factors used in the evaluation process would include whether the

The Dayton Power & Light Company

resource is currently in existence or planned, the location of the resource and how that location might affect capacity factor or output generally, and the project owner/developer's credit-worthiness and experience. It was planned that turnkey construction project proposals and renewable power purchase agreement proposals which included a buyout option would be individually evaluated using similar factors tailored to the specific project or projects. DP&L has retained outside consultants to assist, if needed, in evaluating the financial and technical aspects of power purchase and renewable energy RFP responses.

For non-Ohio facilities, DP&L will consider any renewable energy facility that will qualify toward meeting the targets. This decision will enable DP&L to pick the most cost effective options to meet the requirements. However, there may be a difference in the energy prices between the zone in which a renewable energy resource is located and the Dayton zone. The difference between these prices, and any other costs that may be incurred such as transmission or ancillary services, will result in a variance (favorable or unfavorable). Such variances in prices would be included as part of the proposed Alternative Energy Rider.

2. Results of RFP

Because this filing is being made after responses to the RFP have been received but before definitive agreements are executed, this section necessarily omits proprietary and confidential information.

As expected, most new projects identified in the RFP process would become operational only in late 2010 and beyond. This timeframe was expected for the following reasons:

- Manufacturing capacity is sold out for months to years for more mature technologies such as wind energy
- The Renewable Energy industry is in its infancy within the State of Ohio
- Project developers (including utilities) will require at least 12-24 months lead time to plan and execute projects

C. <u>Potential Projects Outside the RFP Process</u>

While the RFP process will be used initially to identify potential resources that could be acquired to comply with SB 221, DP&L has been actively gathering information concerning other potential renewable resource projects that it could develop either on its own or in conjunction with others. Among the resources being examined are: smallscale hydropower that could be sited at one or more of its generating plants to take advantage of cooling water that currently flows through the plant and is discharged to a nearby creek bed; potential construction of a small-scale tire fractionation plant that would yield a clean fuel for use in an existing powerplant; a wood pelletization project that would create a fuel for use in an existing powerplant; partnering with other entities on larger-scale hydropower; and evaluations of the potential for production of gas from the digestion of agricultural wastes.

To the extent that any projects are identified for implementation, these projects are expected to be included in an Integrated Resource Plan ("IRP") filing that would be made when appropriate and consistent with PUCO rules. It is further expected that the construction of such projects will occur pursuant to a competitive bid process. To the extent that any projects outside the RFP process are identified for implementation, it is expected that the construction of such projects will occur pursuant to a competitive bid
process. To the extent that DP&L expects to implement new generation that is dedicated to its Ohio consumers, the Company expects that it will seek recovery of such generation project through a non-bypassable charge consistent with ORC 4928.143(B)(2)(c).

Chapter 4

Rate Recovery

DP&L proposes a tariff rider that would track all of the costs associated with compliance with the renewable energy target and any costs that might be incurred in the future to comply with advanced energy targets to the extent not recovered through the riders approved as part of the implementation of the Company's CCEM programs.

The proposed rider has an effective date of April 1, 2009, consistent with other timeframes contained in this filing. Costs will be deferred as incurred and reflected in the Alternative Energy Rider. The next time the tariff rate is reset it will include interest calculated at the authorized cost of capital. There may be both a non-bypassable charge and a bypassable charge, each of which will be expressed as a per kWh charge. It is expected that initially all such charges will be in the bypassable category. To the extent that projects and PPAs are identified that DP&L will own and dedicate to its Ohio consumers, DP&L anticipates that it will submit those projects and PPAs for Commission review through an IRP filing and take additional steps that will qualify the project for recovery through a non-bypassable charge. All customer classes will pay the same per kWh charge, for all kWh.

A relatively small amount of costs are expected to be incurred in 2008, most of which are associated with the costs of outside consultants and the evaluation of RFP responses and associated case activity. The Company requests approval for deferral and recovery of these costs beginning with the implementation of the proposed rider. The costs expected for 2009 will primarily be for the purchase of RECs and administration costs. Market prices for RECs will likely vary between the date that this Compliance

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Plan is filed and the date that it is approved, after which RECs would be purchased. At the present time, the market value of a national non-solar REC is approximately \$4 per MWh. The market value of a solar REC is approximately \$575 per MWh. Given the infancy of the Ohio based REC market, DP&L expects Ohio RECs to be scarce and in high demand, resulting in price levels above the surrounding markets. Applying the above values to the renewable targets set forth in Section II.B above, and dividing those costs by 100% of the estimated 2009 retail sales made within DP&L's service area, would yield a per kWh charge of \$0.0001146 for 2009. These calculations are described in greater detail in the testimony and schedules of DP&L Witness Seger-Lawson. The actual cost will depend on the market prices available at the time of purchase as well as the premium that the market places on RECs located in Ohio.

Additional types of costs to be reflected in the rider may be incurred in 2009 and are likely to be incurred in subsequent years. A PPA from a renewable resource may be executed for full output (i.e., capacity, energy, RECs, transmission, and ancillary charges). Those costs would all be reflected in the rider and excluded from other rate components. In the event that DP&L were to purchase a turnkey facility or otherwise own a renewable asset, all costs, including a reasonable rate of return, would be reflected in the rider.

DP&L expects that the proposed rider will be refiled annually and trued-up, i.e., any over- or under-recovery of costs due to variations in levels of actual vs. estimated costs or actual vs. estimated sales volumes would be returned or recovered through the subsequent rate with an interest component set at the cost of capital. It may be necessary

to file more frequently than annually as appropriate to reflect significant changes in costs or if the over- or under-recovery position becomes significant. The level of costs will be monitored to ensure that prices do not exceed the 3% level set forth in SB 221.

The Dayton Power and Light Company

Request for Proposals ("RFP")

For

Renewable Energy Resources July 25, 2008

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The Dayton Power and Light Company ("DP&L") is issuing the following Request for Proposals ("RFP") to comply with the requirements of Ohio Senate Bill 221 as enacted by the General Assembly of the State of Ohio ("SB221") and for other purposes. DP&L reserves the right in its sole discretion to update, supplement or amend to this RFP.

A Purpose

DP&L is seeking proposals leading to a supply portfolio that may include power purchase agreements, the acquisition of assets, and / or the acquisition of Renewable Energy Certificates ("RECs"), from Renewable Energy Resources ("RERs") defined consistently with SB221 to include:

- Wind energy
- Solar photovoltaic or solar thermal energy
- Geothermal energy
- Fuel derived from solid wastes through fractionation, biological decomposition, or other process that does not principally involve combustion as defined in Section 3734.01 of the Ohio Revised Code
- Hydroelectric power
- Energy derived from biologically derived methane gas
- Energy derived from non-treated byproducts of pulping/wood manufacturing
- Fuel cells used in the generation of electricity
- A storage facility that will promote the better utilization of a renewable energy resource that primarily generates off peak power
- Distributed systems that would be owned by DP&L but sited at and used by a mercantile customer (as defined in SB221) to generate electricity

As used herein, RECs mean Green Tags or other similar designations that the State of Ohio may use in connection with the obligations imposed by SB221 with respect to RERs.

DP&L is seeking a minimum of 38,000 Megawatt-hours (MWh) of energy generated by RERs or RECs by the end of the calendar year 2009 which includes 625 MWh of solar photovoltaic or solar thermal ("Solar") energy or RECs. By calendar year 2015, these requirements will continue to grow to 552,000 MWh RERs or RECs which includes 24,000 MWh of Solar energy or RECs. The approximate levels of annual RERs MWh needs are as follows:

Power Type	2009	2010	2011	2012	2013	2014	2015
Solar energy	625	1,550	4,700	9,400	14,100	19,000	24,000
Total RERs	38,000	77,000	155,000	233,000	312,000	392,000	552,000

Bid proposals may be in the form of:

- (i) Power Purchase Agreement ("PPA") (energy plus associated RECs and other ancillary services)
- (ii) Power Purchase Agreement with a buyout option
- (iii) Turnkey Construction Project (including the transfer of all rights to RECs)
- (iv) Sale and Purchase Agreement for RECs on a stand-alone basis (no energy, capacity, or other products)
- (v) Any combination of the above.

Bid participants ("Bidders") should prepare offers with the understanding that the offer in one of the above forms may ultimately result in an agreement in a different form.

B Bidder Instructions

B.1 Project Detail

B.1.1 Contract Terms

The minimum acceptable contract term for any PPA is three (3) years. DP&L prefers contract terms ranging from three (3) to seven (7) years. Contract terms up to 20 years will be considered for all proposals.

B.1.2 Ohio Eligibility

Ohio SB221 requires at least 50% of the renewable energy purchased or generated by Ohio utilities to come from within the State of Ohio. DP&L will have a preference for RERs located within the State of Ohio, but all conforming proposals wherever sited will be evaluated.

B.1.3 Commercial Operation Date

DP&L will consider RERs with an in-service date of January 1, 1998 or later. DP&L will have a preference for RERs that are currently in-service or can be placed in service prior to the end of 2010, but all conforming proposals with later in-service dates will be considered.

B.1.4 Minimum Capacity

Qualifying Solar RER must have a minimum aggregated nameplate capacity of 250 KW, while other RERs must have a minimum aggregated nameplate capacity of 1 MW at the interconnection point between the RERs and the transmission/distribution grid.

B.1.5 REC Purchase

REC purchases will be considered from RERs that deliver energy into Ohio as part of this RFP.

B.2 Overview

- B.2.1 Nothing contained in this RFP or otherwise shall be construed to require or obligate DP&L to select any proposals or limit the ability of DP&L to reject any or all proposals in its sole and exclusive discretion. DP&L further reserves the right to withdraw and terminate this RFP at any time.
- **B.2.2** The submission by a Bidder of a proposal to DP&L shall constitute the Bidder's acknowledgment and acceptance of all the terms, conditions and requirements of this RFP, including the terms of the form Certification and Indemnity Agreement attached hereto as Exhibit C.

- B.2.3 Subject to B.2.4, all proposals submitted to DP&L pursuant to this RFP shall become the exclusive property of DP&L and may be used for any reasonable purpose by DP&L.
- B.2.4 DP&L shall consider materials provided by Bidders in response to this RFP to be confidential only if such materials are clearly designated as "Confidential". Bidders should be aware that their proposals, even if marked "Confidential", may be subject to discovery and disclosure in regulatory, judicial or similar proceedings that may or may not be initiated by DP&L. Bidders may be required to justify the requested confidential treatment under the provisions of a protective order issued in any such proceedings. If required by an order of an agency or authority of competent jurisdiction, DP&L may produce the material in response to such order without prior consultation with the Bidder.
- B.2.5 Bidders shall be responsible for all costs and issues associated with submitting bids including but not limited to: contract negotiations; completion of the contract; all taxes, duties, fees and other charges associated with the delivery of capacity and energy under the contract; and compliance with all local, state, and federal laws that may affect the contract.
- B.2.6 DP&L anticipates that transmission access may be a factor in selection of the final bid(s). For purchased RERs, the delivery point shall be the DAY load zone within the PJM Interconnection ("PJM") ("Delivery Point") currently known as the DAY commercial pricing node in PJM, and all costs and coordination required for any applicable Transmission Service Requests to the Delivery Point shall be the responsibility of the Bidder.
- **B.2.7** This RFP is seeking bid proposals for RERs that is counted and verified in terms of MWh or MW as defined in Section B.2.9.

- **B.2.8** DP&L does not presently have any land earmarked for RERs. Bidder should assume responsibility of necessary land procurement consistent with its proposal.
- B.2.9 The RERs can be intermittent in nature; however, firm or dispatch-able supply may be assigned a capacity value in the review process. The bidder must commit either:

B.2.9.1 Fixed annual output MWh, or

- B.2.9.2 Nameplate capacity of the project, forecasted annual output.
- B.2.10 DP&L desires to diversify its supply portfolio and meet its obligations under SB221. DP&L is accepting bids from any and all RER options that meet the RFP criteria. DP&L seeks bid proposals that provide the greatest value to DP&L and its customers as determined by DP&L in its sole discretion. Value, for purposes of this solicitation may include, without limitation, price, reliability, and flexibility as to bid proposal structure and physical resource characteristics (delivery scheduling requirements, dispatch capability, etc.). The bid proposals that have greater value to DP&L and its customers may not necessarily be the lowest priced proposals.
- **B.2.11** Proposed transactions may be in the forms as described in Section A of this RFP.

B.3 RFP Process Overview

B.3.1 DP&L has designated an individual to manage the RFP process and to collect all internet communication from potential bidders as well as to provide uniform communication including updates and specific details as may be provided from time to time through this bidding process. Please

address all questions and communications to Shirish K. Desai at the following email address: <u>Shirish.desai@dplinc.com</u>

B.3.2 The RFP bid process will include the events as indicated on the schedule in Exhibit A. Following the release of the RFP, interested Bidders will be requested to submit a Notice of Intent to Bid form. Prior to a Bidder's submission of a Proposal, the Bidder must execute and then deliver to DP&L, at the address referenced in Section B.5.4, a Certification and Indemnity Agreement in the form attached hereto as Exhibit C. Submissions and Proposals will be screened and those that do not meet the requirements of this RFP may be rejected as non-conforming in DP&L's sole discretion. Bidders on any short list developed will be invited to begin negotiations of final details of the offers. Final evaluation of the offers, considering contract terms and transmission service requirements, will then be performed.

B.4 Notice of Intent to Bid Requirement

B.4.1 Each potential Bidder is requested to advise DP&L of its intent to submit a proposal by submitting a Notice of Intent to Bid ("NOIB"), attached hereto as Exhibit B. Exhibit B submittals may be faxed to the attention of Shirish K. Desai at 937-259-7250, or emailed to <u>Shirish.desai@dplinc.com</u>.

B.5 Deadline and Method for Submitting Proposals

- **B.5.1** Proposals must be submitted in the complete legal name of the party expecting to execute any resulting contract with DP&L.
- **B.5.2** All proposals submitted in response to this RFP must be received no later than September 12, 2008, as indicated on Exhibit A.

- B.5.3 DP&L in its sole discretion may not evaluate proposals received after the specified date relative to other proposals that are submitted on time. DP&L reserves the right to retain late filed submissions, however, and to evaluate them in its sole discretion.
- B.5.4 Bidders are required to provide three (3) bound sets of all documents, including exhibits, as part of its proposal. It is further requested that multiple proposals submitted by each Bidder be identified separately. A CD containing the required bid proposal energy profile must also be included. Data should be presented in a spreadsheet format as detailed in Exhibit D, Item C, Energy Profile. Proposals must be delivered to the following address:

The Dayton Power & Light Company Attn: Shirish K. Desai 1065 Woodman Drive Dayton, Ohio 45432 Phone 937-259-7310 (for overnight packages)

Only hard copies of the proposals, including the required CD, will be allowed. Emailed proposals will not be considered as meeting the time requirements for submitting responses.

B.6 Questions

DP&L requests that all questions concerning this RFP be submitted in writing to the email address indicated in Section B.3.1. Answers will be provided through written email correspondence. DP&L is not responsible for misinterpretations of the RFP.

Written questions will be accepted until seven (7) calendar days before the proposal submittal deadline.

It shall be the obligation of the Bidder to identify any conflicting statements, need for clarification, or omissions of pertinent data from the RFP before bids are due. Any questions not resolved by the deadline shall be identified in the proposal and a statement made as to the basis of the proposal.

B.7 Other Required Conditions

- B.7.1 Before executing a contract, Bidder's proposed RERs under the RER sale option must satisfy Reliability First/NERC Guidelines and the PJM Interconnection's ("PJM") resource adequacy and injection rights requirements for obtaining Network Integration Transmission Service under the PJM Open Access Transmission Tariff and for accreditation by the applicable NERC regional reliability council or successor organizations. Bidder shall provide DP&L with sufficient documentation necessary to demonstrate compliance with these requirements. Bidder will be required to submit generation interconnection applications to PJM for Feasibility, System Impact, and Facilities Engineering Studies and follow the PJM process to obtain generation interconnection rights.
- B.7.2 Bidders are advised that prior to DP&L signing a PPA or turn-key construction project agreement(s), the Bidder will be required to provide substantial evidence of credit assurance. All forms of credit assurance will be subject to approval by DP&L before DP&L enters into an agreement. The form and quality of credit assurance shall be subject to approval by DP&L, as applicable, prior to further negotiations.
- **B.7.3** Proposals must be provided in the format outlined in Section C. The content of proposal(s) shall be subject to the requirements of this RFP. DP&L requests that all exhibits, documents, schedules, etc. submitted as a part of a proposal be clearly labeled and organized in a fashion that facilitates easy

location and review. All proposals must conform, as applicable, to the requirements within this RFP.

- **B.7.4** Any Production Tax Credits associated with the RERs will be the property of the Bidder.
- **B.7.5** DP&L will take title to all RECs and all environmental attributes, including carbon reductions or carbon credits, associated with the RER sale option.
- **B.7.6** DP&L may require Bidder to obtain REC certification through a mutually agreed upon third party.

B.8 Requirements of Transmission

- **B.8.1** The Bidder should indicate the interconnection point for existing RER.
- B.8.2 With respect to the RER option, the proposal will also be screened based on the current or anticipated congestion and losses associated with transmission of power to the Delivery Point.
- B.8.3 Bidders will be required to submit generation interconnection applications to PJM for Feasibility, System Impact, and Facilities Engineering Studies and follow the PJM process to obtain generation interconnection rights.
- **B.8.4** All RERs must be able to deliver energy to the PJM or MISO transmission grid and be qualified as energy that can be shown to be deliverable into the State of Ohio as defined by OH SB221. If the RER is not currently located on the PJM or MISO grid, it is the responsibility of the bidder to identify transmission service providing delivery and account and pay for any fees.
- **B.8.5** Associated energy shall be scheduled as needed with the maximum flexibility allowed for the effective period of the associated contract.

C Proposal Organization

All Proposals should include the following minimum components in the order provided:

C.1 Executive Summary

An "executive summary" is required showing the highlights and special features of the proposal. The executive summary should clearly state the number and types of proposals being submitted by the bidder.

C.2 Statements

- C.2.1 A statement from the Bidder must be provided clearly indicating the time period during which the proposal will remain effective.
- C.2.2 A Certification and Indemnity Agreement in the form attached hereto as Exhibit C must be executed by an authorized representative of Bidder and delivered to DP&L prior to Bidder's submission of a proposal.

C.3 Contract Terms

A comprehensive listing and description, including a rationale if warranted, of all contract terms and conditions that the Bidder would seek during contract negotiations is required.

C.4 Proposal Limitations

A listing of any economic, operational or system conditions (including sensitivities to anticipated dispatch levels) that might affect the Bidder's ability to deliver energy as offered.

C.5 Relevant Experience

A description of the Bidder's transaction experience with similar products and transactions as well as references for similar transactions.

C.6 Price Proposal

Information on the cost of the product or acquisition price must be provided. Information shall be included as discussed in Section D.1.

C.7 Term Sheet

C.7.1 Power Purchase Agreement

Information on the product cost of energy and other information shall be provided as per the sample Term Sheet contained in Bidder Response Package – Exhibit D. Power Purchase Agreement proposals shall provide a fixed price per unit of energy and all associated RECs for their proposed term including the cost for all losses, congestion costs, ancillary services, transmission delivery fees, PJM or other associated fees, taxes, duties, and any other costs associated with the furnishing of the associated energy to the proposed Delivery Point. For consideration in the evaluation process, proposals must contain a statement that all such fees have been included in the proposed price.

C.7.2 Option to Buy Asset or Turn-key Construction Information shall include, as applicable, full purchase price and a lump sum amount stated in the year of project closure.

C.7.3 Stand-alone Agreement for RECs

Proposals shall include the price, term, quantity, and source of RECs.

D Proposal Pricing Requirements

For consideration in the evaluation process, proposals must contain the information outlined in this section and any applicable information as specified in Exhibit D.

D.1 Price Structuring

Proposals must provide a detailed description of the pricing terms and conditions. For consideration in the evaluation process, proposals must contain the information outlined in the following paragraphs, as applicable.

D.1.1 Contract Purchase

The Bidder must demonstrate that it has the requisite regulatory authorization to make the transactions contemplated by its proposal.

- D.1.1.1 The fixed price per unit of energy and associated RECs for the bid shall be provided for each year of the agreement.
- D.1.1.2 Proposed energy and associated RECs rates shall include all fuel, start up, losses, ancillary services, transmission and other charges associated with delivery to designated Delivery Point.
 - D.1.1.2.1 The Bidder shall provide the initial energy rate and applicable formula for escalation, if any, with proposed indices or a schedule of energy rates for the proposed contract term.
 - D.1.1.2.2 The actual hourly delivered energy in any month, shall be determined in accordance with the metering procedures as set forth in the contract which will be negotiated between DP&L and the successful Bidder.

- D.1.1.3 As applicable, the Bidder's proposal should include all formulae that will be used to calculate the full energy rate, or any other rate that the Bidder may specify, with all its respective components well defined. A sample calculation illustrating the application of each formula is also required.
- D.1.1.4 The Bidder must provide a printed schedule projecting for each contract year, quarter, or month, as appropriate, depending upon how frequently the Bidder's rate(s) or its respective components will be updated, for the full term of the proposed contract of the following:
 - D.1.1.4.1 It is the Bidder's obligation to provide sufficient explanatory information to allow DP&L to replicate this schedule.
 - D.1.1.4.2 Projections of any independent variables that are to be used in the calculation of payments
- D.1.2 Bidders may offer to sell all or a share of an ownership interest in a new or existing RER, provided that the resource has an in-service date of January 1, 1998 or later. The payment for such an equity purchase would be subject to negotiation. The Bidder must demonstrate that it has the requisite authorization to make an offer and sale for an equity purchase in the facility represented in its proposal.

E Proposal Evaluation and Contract Negotiations

E.1 Screening

E.1.1 Proposals submitted by the deadline, will be reviewed for completeness and responsiveness.

- E.1.2 Proposals will be evaluated based on but not limited to: price, transmission feasibility, economic analysis, cost of delivery, contract extension options, bidder's relevant experience and reputation, or other evaluation criteria. The short list will be developed based upon the results of this initial analysis.
- E.1.3 DP&L may request that a Bidder provide additional information or clarification to its original proposal. DP&L shall make such requests via email and will also specify a deadline for compliance. Failure to provide the requested information or clarification by the deadline could result in the disqualification of the proposal.
- E.1.4 DP&L may select any number of proposals for further consideration. Further, DP&L may at any time withdraw and terminate this RFP, in its sole and exclusive judgment, as it deems appropriate.

E.2 Short List Development

- E.2.1 During the evaluation process, DP&L may choose to initiate discussions with one or more Bidders and to obtain refreshed pricing. For purposes of this RFP, discussions shall simply indicate DP&L's interest in a particular proposal and its desire to obtain from the Bidder additional detailed information that may not necessarily be contained in the proposal. Discussions with a Bidder shall in no way be construed as commencing "negotiations" with a Bidder. DP&L intends to use such discussions as a method of reducing the number of proposals to those, if any, that it determines warrant further evaluation and, possibly, contract negotiations. If DP&L intends to initiate discussions, it will notify the Bidder of such intention and require the Bidder of such proposal to confirm, in writing, the offer and representations contained in its original proposal.
- **E.2.2** DP&L will verify all RERs on the short list for interconnection, congestion and feasibility of transmission at the cost of the Bidder.

E.3 Contract Negotiations

- E.3.1 The Bidder will be notified in writing of DP&L's interest in commencing contract negotiations with that Bidder. The commencement of and active participation in such negotiations shall not be construed as a commitment from DP&L to execute a contract. If, however, a contract is successfully negotiated, it shall not be effective unless and until fully executed by DP&L in accordance with its procedures and any and all required regulatory approvals have been received to DP&L's satisfaction.
- E.3.2 DP&L reserves the right at any time, including during the contract negotiations, at its sole discretion, to terminate or, once terminated, to resume negotiations with a Bidder.
- E.3.3 DP&L intends that any agreement entered into will include a regulatory review provision that will provide that if, in DP&L's sole judgment and discretion, the regulatory treatment of the agreement is unacceptable, then DP&L may without liability terminate the agreement unilaterally or propose a mutually-acceptable modification to the agreement.
- **E.3.4** DP&L may require that certain provisions be included in its contracts. Such provisions may include, but are not limited to: representations and warranties by Bidder, including, those relating to the adequate financial assurance of Bidder (depending on the financial means and historical performance of the Bidder) and compliance by Bidder with all applicable laws; indemnification by Bidder; Bidder's events of default and payment of liquidated damages for non-performance; ability of DP&L to reassign its entire rights, or a portion thereof, under the contract to another party; ability of DP&L to terminate or modify the agreement without liability if the agreement does not receive appropriate regulatory treatment.

E.3.5 This RFP contains general guidelines and requirements for developing and submitting proposals. Nothing herein shall be construed to bind DP&L. A fully executed and effective contract will govern the relationship between and responsibilities of the parties.

E.3.6 The costs for responding to the RFP are the sole responsibility of the Bidder.

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Exhibit A RFP Schedule

The schedule as outlined below and referred to throughout this document is based on DP&L's expectations as to the release date of this RFP.

Release of RFP	7/25/2008
Notice of Intent to Bid	8/15/2008
Proposal Submittal Deadline	9/12/2008
Initial Selection of Shortlist	TBD
DP&L and Select Bidders negotiate and execute	TBD
Agreements pending Regulatory Approval; DP&L	
submits Agreements for Approval	

DP&L reserves the right to extend or otherwise modify any portion of the schedule or terminate the RFP process at its sole discretion. All parties that have submitted an Notice of Intent to Bid as described in Section B.3 will be notified in writing of any changes to the schedule that occur prior to completion of the evaluation phase.

Exhibit B NOTICE OF INTENT TO BID Requested to be received by August 15, 2008

	C	CONTAC	CT INF	ORMAT	ION		
Company/							
Proposed Technology					-		
Type of Proposal							
Expected Annual Output MWh					~		
By Technology							
Contact:					_		
Name							
Title							
Telephone / Fax					_		
E-mail							
Mailing Address							
Signature of Respondent						Date	

The Dayton Power & Light Company:

Attn: Shirish K. Desai 1065 Woodman Drive Dayton, Ohio 45432 Fax: 937-259-7250

e-mail: Shirish.desai@dplinc.com

Exhibit C Certification and Indemnity Agreement

THIS CERTIFICATION AND INDEMNITY AGREEMENT ("Agreement") is made and entered into by and between The Dayton Power and Light Company (DP&L") and [Supplier Must Input Full Legal Name Here]______("Supplier").

WHEREAS, Supplier intends to submit or has submitted one or more Proposals to DP&L (collectively, and including any changes, updates, supplements, or other modifications thereto, the "Proposal") in response to DP&L's Request for Proposals for Renewable Energy Resources dated July 25, 2008 (including any changes, updates, supplements or other modifications thereto by DP&L, the "RFP"), and seeks or will seek DP&L's consideration of the Proposal, and

WHEREAS, the RFP provides general guidelines for the development and submission of such Proposal and entails the evaluation of such Proposal on the basis of its individual characteristics, as assessed by DP&L in its sole discretion, and

WHEREAS, DP&L will rely on the information set forth in the Proposal when making its assessments and determinations.

NOW, THEREFORE, in consideration of the covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

A. Supplier hereby certifies, represents and warrants to DP&L as follows: (i) The Supplier understands that DP&L will rely on the representations and other information contained in the Proposal and this Agreement in its evaluation and consideration of proposals submitted pursuant to the RFP; (ii) The Supplier further understands that its inability to substantiate and verify any such representation or other information may result in the termination of further consideration and/or evaluation of Supplier's Proposal; (iii) All such representations and other information made in the Proposal are true and accurate to the best of the Supplier's knowledge and belief and Supplier, DP&L and the DP&L Parties (as defined below) are permitted and authorized to use all of the information in the Proposal; and (iv) this Agreement constitutes a legal, valid and binding obligation of the Supplier and the Supplier has the full right, power and capacity to execute and deliver this Agreement and to perform its obligations under this Agreement.

B. The Supplier agrees that:

(i) Supplier shall indemnify and hold harmless DP&L and its respective subsidiaries, affiliates, successors and assigns, and each and every one of their respective past, present, and future officers, directors, trustees, employees, shareholders, executors, administrators, successors, agents, and assigns, as well as the heirs, executors, administrators, successors, and assigns of the foregoing, (collectively, the "DP&L Parties") from and against any and all manner of past, present, or future claims, demands, disputes, controversies, complaints, suits, actions, proceedings, allegations, loss, damage, cost, and expense (including court and regulatory costs and reasonable attorney and expert fees) which in any manner relate to, arise out of, or result from any false or misleading statement in the Proposal or breach of any agreement, covenant, certification, warranty, or representation set forth in this Agreement by the Supplier.

(ii) All information in the RFP is provided "AS IS" and DP&L disclaims all guaranties, representations, and warranties (both express and implied) relating to or in connection with any and all information contained in the RFP, including, without limitation, the accuracy, completeness, timeliness, use, and/or suitability of such information. DP&L and the DPL Parties shall not be responsible or liable for any damages (in contract, tort, or otherwise) arising out of, related to, or in connection with any action or inaction by DP&L or any of the DP&L Parties with respect to the RFP process (including, without limitation, DP&L's consideration and decision with respect to any proposal or the withdrawal, modification or termination of the RFP) or with any information contained in the RFP (including, without limitation, the accuracy, completeness, timeliness, use, and/or suitability of such information). Supplier shall not bring, maintain or support any action or proceeding (in law, equity or otherwise) against DP&L or any of the DP&L Parties with respect to the RFP process (including, without limitation and decision with any action or inaction by DP&L or any of the DP&L Parties arising out of, relating to, or in connection with any action or inaction by DP&L or any of the DP&L Parties with respect to the RFP process (including, without limitation, DP&L 's consideration and decision with any action or inaction by DP&L or any of the DP&L Parties with respect to the RFP process (including, without limitation, DP&L 's consideration and decision with respect to any proposal or the withdrawal, modification or termination of the RFP) or with any information contained in the RFP (including, without limitation, DP&L 's consideration and decision with respect to any proposal or the withdrawal, modification or termination of the RFP) or with any information contained in the RFP (including, without limitation, the accuracy, completeness, timeliness, use, and/or suitability of such information).

C. If the Supplier transfers (by operation of law or otherwise) the ownership, or an interest therein, in the Supplier's rights, interests or property, whether real or personal relating to Supplier's Proposal, the Supplier warrants that such transfer shall be pursuant to a transfer agreement that, and the transferee, shall provide DP&L and the DPL Parties with the rights, indemnification, and degree of protection at least equivalent to that afforded them under this Agreement.

D. This Agreement shall be governed by the laws of the State of Ohio (without regard to its conflicts of laws principles) and each of the parties to this Agreement hereby submits to the exclusive jurisdiction and venue of the federal and state courts located in Montgomery County, Ohio. Supplier shall not assign or delegate any or all of its obligations under this Agreement without the prior written consent of DP&L. If any term or provision of this Agreement or the application thereof is held by an authority of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms and provisions of this Agreement shall remain in full force and effect and shall in no way be effected, impaired or invalidated, and such invalid, void or unenforceable term or provision shall be modified by such authority and enforced to the fullest extent permitted by applicable law consistent with the intent and terms and provisions of this Agreement. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement.

Each of the parties to this Agreement, by a duly authorized representative, has executed this Agreement. This Agreement shall be effective as of the date first executed by any party.

[Supplier Must Input Full Legal Name Here]

By: Title: Date:

The Dayton Power and Light Company

By: Title: Date:

Exhibit D

Bidder Response Package

A. General Information	
Project Name:	
Project Location:	
Offer Type (PPA or Sale/Put	rchase):
Project Status: (New or exist	ting)
Project Term (Start/Stop):	
Technology:	
Electrical Interconnection L	ocation (Interconnection type, transmission or distribution line)
Delivery:	DAY Zone in PJM Interconnection

Term:

Brief project Description (include proposal overview, Renewable Energy Resource status, expected facility life, general description of agreements or rights in place, facility size, type, and manufacturer of technology, Renewable Energy Resource developer experience, and environmental benefits of Renewable Energy Resource):

B. Operational Information

Net Capacity (based on summer peak conditions):

(At minimum aggregated of 250 KW for Solar RER, while I MW minimum aggregated for other RERs)

Baseload/Intermittent/Peaking:
Dispatchable/Nondispatchable (must take):
Expected Capacity Factor:
Primary Fuel Source:
Secondary Fuel Source:
Availability (%):
Heat Rate (BTU/KWh(HHV)):
Forced Outage Rate (%):
Minimum Run Time (hrs):
Minimum Down Time (hrs):
Planned Outage Rate (%):

C. Energy Profile

Please provide a generation profile forecast (for a typical year) of each month's average-day net output energy production, stated in MW by hour and month.

Month Jan Feb Mar Apr May Jun Jui Aug Sep Oct Nov Dee	<u>0100</u>	<u>0200</u>	<u>0300</u>	<u>0400</u>	<u>0500</u>	<u>0600</u>	<u>0700</u>	<u>0800</u>
Month Jan Feb Mar Apr May Jun Jul Áug Sep Oct Nov Dec	<u>0900</u>	<u>1000</u>	<u>1100</u>	<u>1200</u>	<u>1300</u>	<u>1400</u>	<u>1500</u>	<u>1609</u>
Month Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	<u>1700</u>	<u>1800</u>	<u>1900</u>	<u>2000</u>	<u>2100</u>	<u>2200</u>	<u>2300</u>	<u>2400</u>

D. Pricing Information:

.

a. Power Purchase Agreement (PPA)

Energy Pricing (\$/MWh)

Energy Price Escalation/year (% or index)_____

Energy Pricing year _____

b. Sale/Purchase

Capital Cost:	
-	

Closing Date: _____

Primary Fuel Source:

Primary Fuel Pricing:

Secondary Fuel Source:

Secondary Fuel Pricing:

Variable O&M (\$/MWh):_____

Start Cost (\$/turbine/start):_____

Fixed O&M (\$/MW-yt): _____

c. REC Only Sale

Contract Year Beginning:

Contract Year End:

REC Priœ (\$/MWh):

2009:

2010:

2011:

2012:

2013:

2014:

2015:

Additional Years as required:

d. Tax Credits

Does the bid factor in tax credits? (Yes/No):

If yes, please list Applicable tax credits: (Federal, State, Local):

In the absence of any tax credits, by what amount will the first-year energy price increase?

Energy Pricing (\$/MWh):



1

The Dayton Power and Light Company Case No. 08-1094-EL-SSO Book III - Alternative Energy Plan Atternative Energy Cost Calculation

Type of Filing: Original Work Paper Reference No(s).: None Data: Actual

Schedule A-1 Page 1 of 1 Witness Responsible: Dona Seger-Lawson

Line No.	Description		2009	Source
÷	Estimated Non-Solar Outside Ohio REC Cost	Ś	4.00	Estimate
0	Estimated Non-Solar Ohio REC Cost	\$7	20.00	Estimate
ŝ	Estimated Solar REC Cost	\$	575.00	Estimate
4				
ŝ	Solar Requirement (MWHs)		599	Schedule A-3, line 20, col (B)
9	Non-Solar Ohio Requirement (MWHs)		18,722	Schedule A-3, line 21, col (B)
2	Non-Solar Non-Ohio Regulrement (MWHs)		18,123	Schedule A-3, line 22, col (B)
Ø	•			
0	Est Solar REC cost		\$344,425	fine 3 x line 5
₽	Est Ohio REC cost		\$374,440	Ilre 2 x line 6
11	Est Outside Ohio REC cost		\$72.492	When 1 x line 7
12	Total Estimated REC cost		\$791,357	line 9 + line 10 + line 11
13				
14	Total Estimated REC Cost	•••	1791,357.00	Line 12
15	Deferred Costs	t)	245,790	WPA-1, line 10
16	GATS Registration & Subscription Costs		121,448	Estimate
17	MRETS Registration & Subscription Costs	ø	3,750	Estimate
18	2009 Internal Labor Costs	\$	100,000	Estimate
19	Total Costs	5	262,345.00	Sum of line 15 through 19
20				
2	April - Dec 2009 Standard Offer Forecasted Sales	7	173,205,000	Book II - CCEM WPA-1, line 7, Col (B)
22	April - Dec 2009 Total Retail Forecasted Sales	±	14,698,000	Book II - CCEM WPA-1, line 3, Col (B)
23	Jurisolictional Allocator		77%	Line 21 / Line 22
24	Total Standard Offer Renewable Costs		\$971,076	Line 19 * Line 23
25				
30	Estimated 2009 Alternative Energy Rider	69	0.0001146	Line 19 / line 21

The REC cost contained in this schedule is an estimate only. Actual costs will vary based on the type of RECs actually purchased as well as the market value at that time. NOTE:

Line 19 / line 21

0.0001146

Estimated 2009 Alternative Energy Rider



The Dayton Power and Light Company Case No. 08-1094-EL-SSO Book III - Alternative Energy Plan Alternative Energy Cost Calculation

Data: Actual Type of Filing: Original Work Paper Reference No(s).: None

Schedule A-2 Page 1 of 1 Witness Responsible: Dona Seger-Lawson

Line No.	Description		2010	Source
- v	Estimated Non-Solar Outside Ohio REC Cost Fatimated Non-Solar Ohio RFC Cost	69 6 7	4.00 20.00	Estimate Estimate
1014	Estimated Solar REC Cost	• •	575.00	Estimate
tω	Solar Requirement (MWHs)		1,483	Schedule A-3, line 20, col (C)
g	Non-Solar Ohio Requirement (MWHs)		37,065	Schedule A-3. line 21. col (C)
2	Non-Solar Non-Ohio Requirement (MWHs)		35,582	Schedule A-3, line 22, col (C)
භ				
Ø	Est Solar REC cost		\$852,725	line 3 x line 5
10	Est Ohio REC cost		\$741,290	line 2 x line 6
÷	Est Outside Ohio REC cost		\$142,326	line 1 x line 7
12	Total Estimated REC cost		\$1.736.341	line 9 + line 10 + line 11
13				
14	Total Estimated REC Cost	•	1,736,341	Line 12
15	GATS Registration & Subscription Costs	\$	121,624	Estimate
16	MRETS Registration & Subscription Costs	\$	3,000	Estimate
17	2010 Internal Labor Costs	\$	100,000	Estimate
18	Total Costs	\$	1,960,965	Sum of line 15 through 18
19				•
20	2010 Standard Offer Forecasted Sales	11,	563,440,000	Book II - CCEM WPA-1, line 7, Col (C)
21	2010 Total Retail Forecasted Sales	14	823,083,000	Book II - CCEM WPA-1, line 3, Col (C)
22	Jurisdictional Allocator		78%	Line 20 / Line 21
23	Total Standard Offer Renewable Costs	\$	1,529,743	Line 18 * Line 22
24				

The REC cost contained in this schedule is an estimate only. Actual costs will vary based on the type of RECs actually purchased as well as the market value at that time. NOTE

Line 23 / line 20

0.0001323

-

Estimated 2010 Alternative Energy Rider

	The Dayt Ca Book I Renewable and S	on Power and I se No. 08-1094 II - Atternative Solar Energy B	Light Compan -EL-SSO Energy Plan tenchmark Ca	ıy İculation	
Data: Actus Type of Fili	al ng: Original				Schedule A-3 Page 1 of 1 Witness Responsible:
Work Pape	r Reference No(s).: None				Dona Seger-Lawson
Line No.	Description	(A) 2006	(B) 2007	(C) 2008	Source
1007	Weather Normalized Sales Adjustments for 2009 Total Adjusted Sales	15,110,170 <u>-285,771</u> 14,824,399	15,001,267 <u>-219,477</u> 14,781,790	15,467,655 <u>-140,658</u> 15,326,997	Book II - CCEM Exhibit MWB-1 Book II - CCEM Exhibit MWB-1 Line 1 + line 2
r un a	2009 MWh Baseline	14,977,729			Average of line 3
0 ~ ∞ 0	Adjustments for 2010 & Beyond Total Adjusted Sal es	<u>-451.974</u> 14,658,196	<u>-377.823</u> 14,623,444	<u>-272,043</u> 15,195,612	Book II - CCEM Exhibit MWB-1 Line 1 + Line 7
»6:	2010 & Beyond Baseline	14,825,751			Average of line 8
-064	Baseline Annual Renewable Benchmark		200 <u>9</u> 14,977,729 0.25%	<u>2010</u> 14,825,751 0.50%	Line 5 and Line 10 ORC 4928.64(B)(2)
6 61	Solar Requirement		0.004%	0.010%	ORC 4928.64(B)(2)
2 8 9	Total Renewable Target (MVVHs)		37,444	74,129	Line 13 x line 14
2 3 5 5 ²	Solar Target (MWHs) 1/2 Non-Solar from Ohio (MWHs) 1/2 Non-Solar from Outside Ohlo (MWHs) Total Rewewable Sources		599 18,722 <u>18,123</u> 37,444	1,483 37,065 <u>35,582</u> 74,129	Line 13 x line 16 Line 18 / 2 Line 18 - Line 20 - Line 21 Line 13 x Line 15

Type of Filing: Unginal Work Paper Reference No(s).:	mmary Schedule D-1 Page 1 of 1 Witness Responsible: Jeff D. Mackholm Source (F) Book II, Exhibit JDM-18, lines 25 & 27 Book II, Exhibit JDM-19, lines 12 & 14 General Ledger Bal. & Exh. JDM -7	ess Rate of Return Sur Weighted Cost % (E = C * D) 1.89% 0.04% 7.31%	eration Busine 30, 2008 % of Cost (D) 5.49% 4.18% 11.30%	As of June : As of June : % of Total (C) 0.94% 64.71%	ton Power and Light C Amount (B) \$759,404,859 \$20,755,037 \$1,430,469,308	The Day of Capital Structure: June 30, 2008 of Filing: Original Paper Reference No(s).: Class of Capital (A) Long-Term Debt Preferred Stock Common Equity	Date c Type c Line No. 1 2 2
Line Line Source Source No. Class of Capital Amount % of Total % of Cost Weighted Cost % Source No. (A) (B) (C) (D) (E = C * D) (F) 1 Long-Term Debt \$759,404,859 34.35% 5.49% 1.89% Book II, Exhibit JDM-18, I 2 Preferred Stock \$20,755,037 0.94% 4.18% 0.04% Book II, Exhibit JDM-19, I 3 Common Equity \$1,430,469,308 64.71% 11.30% 7.31% General Ledger Bal. & E)	Line 1 + Line 2 + Line 3	9.24%		100.00%	\$2,210,629,204	Total Capital	4
Line Line Source Source No. Class of Capital Amount % of Total % of Cost Weighted Cost % Source No. (A) (B) (C) (D) (E = C * D) (F) 1 Long-Term Debt \$759,404,859 34.35% 5.49% 1.89% Book II, Exhibit JDM-18,	General Ledger Bal. & É	7.31%	11.30%	64.71%	\$1,430,469,308	Freisingu Souch Common Equity	n w
Line Amount % of Total % of Cost Weighted Cost % No. Class of Capital Amount % of Total % of Cost Weighted Cost % No. (A) (B) (C) (D) (E = C * D) 1 Long-Term Debt \$759,404,859 34.35% 5.49% 1.89% Book II, Exhib	Book II, Exhib	0.04%	4.18%	0.94%	\$20,755,037	Preferred Stock	3
Line No. Class of Capital Amount % of Total % of Cost Weighted Cost % S (A) (B) (C) (D) (E = C * D)	Book II, Exhibit JC	1.89%	5.49%	34.35%	\$759,404,859	Long-Term Debt	-
Line No Class of Capital Amount % of Total % of Cost Weighted Cost % So	<u> </u>	(E = C * D)	(<u>a</u>)	(c)	(B)	(A)	
	Sourc	Weighted Cost %	% of Cost	% of Total	Amount	Class of Canital	P R L I N S
	Witnes					of Capital Structure: June 30, 2008	Date o
Date of Capital Structure: June 30, 2008							
Date of Capital Structure: June 30, 2008	mmary	ess Rate of Return Sur	eration Busine 30, 2008	ompany - Gen As of June :	tion Power and Light Co	The Day	

THE DAYTON POWER AND LIGHT COMPANY Case No. 08-1094-EL-SSO BOOK III - Alternative Energy Plan

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4 Total Capital

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO

Book III – Alternative Energy

Schedule E-3 Tariffs

The Dayton Power & Light Company

THE DAYTON POWER AND LIGHT COMPANY MacGregor Park 1065 Woodman Dr. Dayton, Ohio 45432 Original Sheet No. G26 Page 1 of 1

P.U.C.O. No. 17 ELECTRIC GENERATION SERVICE ALTERNATIVE ENERGY RIDER

DESCRIPTION:

The Alternative Energy Rider (AER) is intended to compensate the Dayton Power and Light Company for advanced generation plant investments and compliance costs realized in meeting the renewable portfolio standards prescribed by Section 4928.64 of the Ohio Revised Code.

APPLICABLE:

This rider will be assessed beginning April 1, 2009 on all energy provided under the Electric Generation Service Tariff Sheets G10-19 based on the following rate.

CHARGES:

Energy Charge (All kWh)

\$0.0001146/kWh

TERMS AND CONDITIONS:

DP&L retains the right to adjust the AER annually or more often as circumstances warrant, with PUCO approval.

Filed pursuant to the Finding and Order in Case No. 08-1094-EL-SSO dated ______ of the Public Utilities Commission of Ohio.

Issued _____

Effective April 1, 2009

Issued by PAUL M. BARBAS, President and Chief Executive Officer
The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Pian Typical Bill Comparison Residential

Data: 0 Mo	nths Actual, 1.	2 Months Estin	nated			Schedule E-5
Type of Fili	ng: Original					Page 1 of 12
Work Pape	Ir Reference:	None			N N	tness Responsible:
•						ona Seger-Lawson
	Level of	Level of				
Line No.	(W)	(HWH)	Current Bill	Proposed Bill	Dollar Increase	Percent Increase
	(A)	(B)	(c)	(a)	(E = D - C)	(F = E/C)
7 -	0.0	50	\$9.87	\$9.88	\$0 .01	0.10%
2	0.0	100	\$15.39	\$15.40	\$0.01	0.06%
ŝ	0.0	200	\$26.42	\$26.44	\$0.02	0.08%
4	0.0	400	\$48.52	\$48.57	\$0.05	0.10%
- VD	0.0	600	\$59.57	\$59.63	\$0.06	0.10%
9	0.0	750	\$87.18	\$87.27	\$0.09	0.10%
- - -1	0.0	1,000	\$111.20	\$111.31	\$0.11	0.10%
0	0.0	1,200	\$130.43	\$130.57	\$0.14	0.11%
9	0.0	1,400	\$149.67	\$149.83	\$0.16	0.11%
10	0.0	1,500	\$159.31	\$159.48	\$0.17	0.11%
-	0.0	2,000	\$207.37	\$207.60	\$0.23	0.11%
12	0.0	2,500	\$255.25	\$255.54	\$0.29	0.11%
13	0.0	3,000	\$303.08	\$303.42	\$0.34	0.11%
14	0.0	4,000	\$398.79	\$399.25	\$0.46	0.12%
15	0.0	5,000	\$494.50	\$495.07	\$0.57	0.12%
16	0.0	7,500	\$733.81	\$734.67	\$ 0.86	0.12%

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The Dayton Power and Light Company **Book III - Alternative Energy Plan** Case No: 08-1094-EL-SSO **Typical Bill Comparison** Residential Heat (Winter) Schedule E-5 Page 2 of 12 Witness Responsible: Dona Seger-Lawson Dollar Increase Percent Increase (F = E/C)0.12% 0.12% 0.10% 0.07% 0.08% 0.10% 0.10% 0.10% 0.11% 0.12% 0.13% 0.14% 0.14% 0.15% 0.15% 0.15% (C) - C) = E) **90.03** \$0.16 \$0.02 \$0.05 **50.06** 50.11 \$0.14 \$0.23 \$0.29 \$0.46 \$0.04 \$0.17 \$0.34 \$0.57 \$0.86 \$0.04 \$26.38 \$87.04 \$315.98 \$9.87 \$15.37 \$48.45 \$59.48 \$118.85 \$133.00 \$140.09 \$210.59 \$386.24 \$104.71 \$175.44 \$245.71 Proposed Bill <u>e</u> \$9.86 \$15.36 \$26.38 \$48.40 \$59.42 \$86.95 \$132.84 \$139.92 \$210.30 \$315.52 \$118.71 \$175.21 \$385.67 \$104.60 \$245.37 Current Bill ပ် Data: 0 Months Actual, 12 Months Estimated Level of (HMH) 1,200 1,400 2,000 000,1 2,500 3,000 4,000 5,000 500 750 100 200 400 **B** ß Work Paper Reference: None Type of Filing: Original Level of (Reference) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 ٢ 0.0 Line No. 2 20 50 ø Ð **O** Ŧ 4 က \mathbf{T} Ð

5561.92

\$661.06

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Data: 0 Mor Type of Fillr	nths Actual, 1 10: Orioinat	2 Months Estin	nated			Schedule E-5 Page 3 of 12
Work Papel	r Reference:	None			δ Ω	thess Responsible: ona Seger-Lawson
	Level of		Current Dill	Droppood Bill	Dollar Increase	Darrant Increase
LINE NO.						
		(a)	())			
+	0.0	50	\$9.86	\$9.87	\$0.01	0.10%
2	0.0	100	\$15.36	\$15.37	\$0.01	0.07%
ო	0.0	200	\$26.36	\$26.38	\$0 .02	0.08%
4	0.0	400	\$48.40	\$48.45	\$0.05	0.10%
ß	0.0	500	\$59.42	\$59.48	\$0.06	0.10%
g	0.0	750	\$86.95	\$87.04	\$0.08	0.10%
7	0.0	1,000	\$110.90	\$111.01	\$0.11	0.10%
ø	0.0	1,200	\$130.07	\$130.21	\$0.14	0.11%
Ċ)	0.0	1,400	\$149.25	\$149.41	\$0.16	0.11%
10	0.0	1,500	\$158.86	\$159.03	\$0.17	0.11%
11	0.0	2,000	\$206.77	\$207.00	\$0.23	0.11%
12	0.0	2,500	\$254.50	\$254.79	\$0.29	0.11%
13	0.0	3,000	\$302.18	\$302.52	\$ 0.34	0.11%
4	0.0	4,000	\$397.59	\$398.05	\$0,46	0.12%
15	0.0	5,000	\$493.00	\$493.57	\$0.57	0.12%
16	0.0	7,500	\$731.56	\$732.42	\$0.86	0.12%

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan TypIcal Bill Comparison Secondary Unmetered

Data: 0 Moi	nths Actual, 1	12 Months Estin	nated			Schedule E-5
Type of Fili	ng: Original					Page 4 of 12
Work Pape	r Reference:	None			Wi	tness Responsible:
						iona Seger-Lawson
	Level of	Level of				
Line No.	(KV)	(HWH)	Current Bill	Proposed Bill	Dollar Increase	Percent Increase
	((B)	(c)	(D)	(E = D - C)	(F = E/C)
.	ŝ	8	\$11.90	\$11.91	\$0.01	0.08%
2	0	6	\$17.05	\$17.06	\$0.01	0.06%
e	10	150	\$22.19	\$22.21	\$0.02	%60.0
4	25	200	\$27.31	\$27.33	\$0.02	0.07%
ŋ	25	300	\$37.57	\$37.60	\$0.03	0.08%
9	25	400	\$47.84	\$47.89	\$0.05	0.10%
7	6	500	\$58.15	\$58.21	\$0.06	0.10%
Ø	99	600	\$68.40	\$68.47	\$0.07	0.10%
6	200	800	\$88.93	\$89.02	\$0.09	0.10%
10	200	1,000	\$109.47	\$109.58	\$0.11	0.10%
1	300	1,200	\$130.01	\$130.15	\$0.14	0.11%
12	500	1,400	\$160.85	\$161.02	\$0.17	0.11%
13	1,000	1,600	\$164.94	\$165.12	\$0.18	0.11%
4	1,000	2,000	\$181.31	\$181.54	\$0.23	0.13%
15	2,500	2,200	\$189.39	\$189.64	\$0.25	0.13%
16	2,500	2,400	\$197.48	\$197.76	\$0.28	0.14%

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan Typical Bill Comparison Secondary Single Phase

Schedule E-5	Page 5 of 12	tness Responsible:	ona Seger-Lawson		Percent Increase	(F = E/C)	0.10%	0.10%	0.07%	0.09%	0.12%	0.14%	0.12%	0.16%	0.11%	0.16%	0.15%	0.15%	0.13%	0.17%	0.13%	0.16%
		M			Dollar Increase	(E = D - C)	\$0.09	\$0.17	\$0.17	\$0.57	\$0.86	\$1.15	\$1.72	\$2.87	\$5.73	\$11.46	\$14.33	\$22.92	\$34.38	\$57.30	\$85.95	\$114.60
					Proposed Bill	(a)	\$85.90	\$163.01	\$239.38	\$610.70	\$712.13	\$813.56	\$1,398.24	\$1,798.34	\$5,089.52	\$7,090.07	\$9,617.61	\$15,271.63	\$26,373.93	\$33,305.81	\$64,879.80	\$73,492.95
nated					Current Bill	(c)	\$85.81	\$162.84	\$239.21	\$610.13	\$711.27	\$812.41	\$1,396.52	\$1,795.47	\$5,083.79	\$7,078.61	\$9,603.28	\$15,248.71	\$26,339.55	\$33,248.51	\$64,793.85	\$73,378.35
12 Months Estim		None		Level of	(KWH)	(B)	750	1.500	1.500	5,000	7,500	10,000	15,000	25,000	50,000	100,000	125,000	200,000	300,000	500,000	750,000	1,000,000
nths Actual,	ng: Original	r Reference:		Level of	(KV)	(Y)	ŝ	i no	9	25	25	25	8	20	200	200	300	500	1,000	1,000	2,500	2,500
Data: 0 Mol	Type of Fili	Work Pape	•		Line No.		-	. 2	। ल	4	- LD	9	~	60	0	9	11	12	13	14	15	16

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan Typical Bill Comparison Secondary Thee Phase

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Data: 0 Mon	ths Actual, 1	2 Months Estir	nated			Schedule E-5
Type of Filin	ng: Original					Page 6 of 12
Work Paper	r Reference:	None			Ň	tness Responsible:
					٥	ona Seger-Lawson
tine No		Level of (K/WH)	Current Rill	Pronosed Bill	Dollar Increase	Percent Increase
		(8)	(C)	(0)	(E = D - C)	(F = E/C)
-	ŝ	500	\$67.49	\$67.55	\$ 0.06	0.09%
0	ŝ	1,500	\$170.19	\$170.36	\$ 0.17	0.10%
c)	10	1,500	\$246.56	\$246.73	\$0.17	0.07%
4	25	5,000	\$617.48	\$618.05	\$0.57	0.09%
¢ر.	25	7,500	\$718.62	\$719.48	\$0.86	0.12%
9	25	10,000	\$819.76	\$820.91	\$1.15	0.14%
7	50	25,000	\$1,802.82	\$1,805.69	\$2.87	0.18%
Ø	200	50,000	\$5,091.14	\$5,096.87	\$5.73	0.11%
Ø	200	125,000	\$8,083.35	\$8,097.68	\$14.33	0.18%
5	500	200,000	\$15,256.06	\$15,278.98	\$22.92	0.15%
11	1,000	300,000	\$26,346.90	\$26,381.28	\$34.38	0.13%
12	1,000	500,000	\$33,255.86	\$33,313.16	\$57.30	0.17%
13	2,500	750,000	\$64,801.20	\$64,887.15	\$85.95	0.13%
14	2,500	1,000,000	\$73,385.70	\$73,500.30	\$114.60	0.16%
15	5,000	1,500,000	\$128,685.17	\$128,857.07	\$171.90	0.13%
16	5,000	2,000,000	\$145,802.78	\$146,031.98	\$229.20	0.16%

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The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book II! - Alternative Energy Plan Typical Biil Comparison Primary Service

Data: 0 Mor	ths Actual, 1	12 Months Estir	nated			Schedule E-5
Type of Filir	ng: Original					Page 7 of 12
Work Paper	Reference:	None			ι. Μ	tness Responsible:
					٥	ona Seger-Lawson
	Level of	Level of				
Line No.	(KW)	(KWH)	Current Bill	Proposed Bill	Dollar Increase	Percent Increase
	(Y)	(B)	(c)	(a)	(E = D - C)	(F = E/C)
-	ŝ	1,000	\$206.68	\$206.79	\$0.11	0.05%
2	ŝ	2,500	\$256.99	\$257.28	\$0.29	0.11%
ო	9	5,000	\$417.85	\$418.42	\$0.57	0.14%
4	25	7,500	\$734.35	\$735.21	\$0.86	0.12%
N)	25	10,000	\$817.41	\$818.56	\$1.15	0.14%
9	50	20,000	\$1,535.92	\$1,538.21	\$2.29	0.15%
7	50	30,000	\$1,862.61	\$1,866.05	\$3.44	0.18%
80	200	50,000	\$4,850.12	\$4,855.85	\$5.73	0.12%
ŋ	200	75,000	\$5,666.82	\$5,675.42	\$8.60	0.15%
10	200	100,000	\$6,483.49	\$6,494.95	\$11.46	0.18%
11	500	250,000	\$16,052.01	\$16,080.66	\$28.65	0.18%
12	1,000	500,000	\$31,999.44	\$32,056.74	\$57.30	0.18%
13	2,500	1,000,000	\$71,623.33	\$71,737.93	\$114.60	0.16%
14	5,000	2,500,000	\$159,063.08	\$159,349.58	\$286.50	0.18%
15	10,000	5,000,000	\$317,763.75	\$318,336.75	\$673.00	0.18%
16	25,000	7,500,000	\$632,076.82	\$632,936.32	\$859.50	0.14%
17	25,000	10,000,000	\$712,971.30	\$714,117.30	\$1,146.00	0.16%
18	50,000	15,000,000	\$1,263,791.24	\$1,265,510.24	\$1,719.00	0.14%

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Atternative Energy Plan Typical Bill Comparison Primary Substation

Schedule E-5 Page 8 of 12 Witness Responsible: Dona Seger-Lawson Dollar Increase Percent Increase (F = E/C)0.17% 0.17% 0.17% 0.18% 0.19% 0.15% 0.20% 0.19% 0.16% 0.17% 0.17% D.19% 0.16% 0.17% 0.19% (<u>E = D - C</u>) \$1,432.50 \$1,719.00 \$1,031.40 \$1,146.00 \$2,005.50 \$2,292.00 \$2,865.00 \$229.20 \$916.80 \$343.80 \$458.40 \$573.00 \$687.60 \$802.20 \$114.60 \$1,290,624.59 **61,368,477.30** \$1,524,182.75 Proposed Bill \$137,241.46 \$168,382.55 \$274,045.45 \$410,849.43 \$684,457.40 \$305,186.53 \$441,990.52 \$473,131.60 \$836,831.92 \$653,316.31 \$914.684.64 \$76,291.66 (<u>a</u>) \$1,288,619.09 \$1,521,317.75 \$1,366,185.30 \$137,012.26 \$168,038.75 \$273,587.05 \$304,613.53 \$410,161.83 \$441,188.32 \$472,214.80 **683,311.40** 835, 399.42 **5912,965.64** 6652.284.91 \$76,177.06 Current Bill ပြ Data: 0 Months Actual, 12 Months Estimated 000,000,01 12,500,000 15,000,000 17,500,000 20.000.000 25,000,000 2,000,000 1,000,000 3,000,000 4,000,000 6,000,000 7,000,000 B,000,000 9,000,000 5,000,000 Level of (HWH) **B** Work Paper Reference: None **Type of Filing: Original** Level of 30,000 10,000 15,000 15,000 000'01 15,000 25,000 25,000 30,000 50,000 60,000 3,000 5,000 5,000 50,000 <u>S</u> 3 Line No. 2 2 5 4 6 Ξ **2 2 4 5 0 1 8 3** Ð

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan Typical Bill Comparison High Voltage Service Schedule E-5 Page 9 of 12 Witness Responsible: Dona Seger-Lawson Doltar Increase Percent Increase (E = D - C) (F = E/C)0.19% 0.19% 0.19% 0.21% 0.19% 0.17% 0.20% 0.19% 0.21% 0.20% 0.22% 0.21% 0.19% 0.19% 0.19% \$1,146.00 \$343.80 \$1,031.40 \$2,292.00 \$3,438.00 \$458.40 \$802.20 \$916.80 \$114.60 \$171.90 \$229.20 \$286.50 \$573.00 \$687.60 \$57.30 \$1,181,258.73 \$1,771,619.31 Proposed Bill \$489,571,89 \$590,898.16 \$111,561.35 \$148,127.73 \$198,790.88 \$229,633.47 \$295,717.87 **5**326,560.46 **5**423,487.49 \$392,644.91 \$59,573.64 \$89,091.67 \$29,952.51 9 \$1,178,966.73 \$1,768,181.31 \$198,447.08 \$488,540.49 \$589,752.16 \$111,332.15 \$295,144.87 \$422,570.69 \$147,841.23 \$229,175.07 \$325,872.86 \$391,842.71 \$59,459.04 Current Bill \$88,919.77 \$29,895.21 ບ Data: 0 Months Actual, 12 Months Estimated 10,000,000 20,000,000 30,000,000 000'000' 2,000,000 6,000,000 7,000,000 8,000,000 9,000,000 ,500,000 2,500,000 3,000,000 4,000,000 5,000,000 500,000 Level of (HMM) (B) Work Paper Reference: None Type of Filing: Original Level of 10,000 12,500 12,500 10,000 15,000 20,000 1,000 2,000 7,500 40,000 60,00 3,000 3,500 5,000 7,500 (Selection of the selection of the selec ٤ Line No. °€ Ξ 6646 N 3 4 S CO ~ 60

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan Typical Bill Comparison Private Outdoor Lighting

Data: 0 N Type of F	Aonths Actual, 1: iling: Original	2 Months Estin	nated			Schedule E-5 Page 10 of 12
WORK Pa	per Keterence:	None	ľ		Ő	iness Kesponsible: ona Seger-Lawson
l ine No	(KVV)	Level of (K/MH)	Current Rill	Pronosed Rill	Dollar Increase	Percent Increase
	(Y)	(B)	(c)	(g)	(E = D - C)	(F = E/C)
~	7000					
2	Mercury	75	\$14.75	\$14.76	\$0.01	0.07%
С	21000					
4	Mercury	154	\$23.65	\$23.67	\$0.02	0.08%
ю	2500					
9	Incandescent	<u>6</u>	\$14.44	\$14.45	\$0.01	0.07%
7	2000					
œ	Fluorescent	66	\$15.85	\$15.86	\$0.01	0.06%
6	4000					
5	Mercury	43	\$16.56	\$16.56	\$0.00	0.00%

Note: Current and proposed bills included monthly charge for 1 fixture, 1 pole, and 1 span

Papel	r Reference:	None			ĮW	tness Responsible:
					Δ	ona Seger-Lawson
	Level of (KWV)	Level of (KWH)	Current Bill	Pronosed Bill	Dollar Increase	Percent Increase
;	(Y)	(B)	(c)	(D)	$(\mathbf{E} = \mathbf{D} - \mathbf{C})$	(F = E/C)
	0.0	1,000	\$136.21	\$136.34	\$0.13	0.10%
	0.0	2,500	\$281.87	\$282.18	\$0.31	0.11%
	0.0	5,000	\$523.78	\$524.37	\$0.59	0.11%
	0.0	10,000	\$1,007.66	\$1,008.83	\$1.17	0.12%
	0.0	16,000	\$1,491.54	\$1,493.29	\$1.75	0.12%
	0.0	25,000	\$2,453.69	\$2,456.61	\$2.92	0.12%
	0.0	50,000	\$4,859.07	\$4,864.89	\$5.82	0.12%
	0.0	75,000	\$7,264.47	\$7,273.19	\$ 8.72	0.12%
	0.0	100,000	\$9,669.85	\$9,681.47	\$11.62	0.12%
	0.0	150,000	\$14,480.62	\$14,498.04	\$17.42	0.12%
	0.0	200,000	\$19,291.39	\$19,314.60	\$23.21	0.12%
	0.0	250,000	\$24,102.17	\$24,131.18	\$29.01	0.12%
	0.0	300,000	\$28,912.93	\$28,947.75	\$34.82	0.12%
	0.0	350,000	\$33,723.70	\$33,764.32	\$40.62	0.12%
	0.0	400,000	\$36,534.48	\$38,580.90	\$46.42	0.12%
	0.0	450,000	\$43,345.25	\$43,397.47	\$52.22	0.12%
	ç	200 000	SAR 156 01	548 214 04	658 03	0 12%

The Dayton Power and Light Company Case No: 08-1094-EL-SSO Book III - Alternative Energy Plan Typical Bill Comparison Street Lighting

Data: 0 Moi	nths Actual, 1.	2 Months Estin	nated			Schedule E-5
Type of Fill	ng: Original					Page 12 of 12
Work Pape	r Reference:	None			M	tness Responsible:
•						Iona Seger-Lawson
	Level of	Level of				
Line No.	(KW)	(KWH)	Current Bill	Proposed Bill	Dollar Increase	Percent Increase
	(A)	(8)	(c)	(a)	(E = D - C)	(F = E/C)
÷	0	50	\$4.80	\$4.81	\$ 0.01	0.12%
~	0	100	\$7.51	\$7.52	\$0.01	0.15%
n	0	200	\$12.90	\$12.92	\$0 .02	0.18%
4	0	400	\$23.71	\$23.76	\$0.05	0.19%
2	0	500	\$29.16	\$29.22	\$0.08	0.20%
9	0	750	\$42.66	\$42.75	\$0.09	0.20%
2	0	1,000	\$56.15	\$56.26	\$ 0.11	0.20%
Ø	0	1,200	\$66.96	\$67.10	\$0.14	0.21%
σ	0	1,400	\$77.77	\$77.93	\$ 0.16	0.21%
10	0	1,600	\$88.60	\$68.78	\$0.18	0.21%
÷	0	2,000	\$110.21	\$110.44	\$0.23	0.21%
12	0	2,500	\$137.05	\$137.34	\$0.29	0.21%
13	0	3,000	\$163.81	\$164.15	\$0.34	0.21%
14	0	4,000	\$217.42	\$217.88	\$0.46	0.21%
15	0	6,000	\$271.02	\$271.59	\$0.57	0.21%

The Dayton Power and Light Company Case No. 08-1094-EL-SSO Book III - Alternative Energy Plan Deferred Cost Calculation

i

Workpaper WPA-1Data: ActualType of Filing: OriginalWork Paper Reference No(s).: NoneDona Seger-Lawson

<u>Line No.</u>	Description		2008	Source
- 0	Consulting Fees	4	125,000	Contract not to exceed
ന	Internal Labor	\$	100,000	Esimate
4	Total 2008 Costs	\$	225,000	Line 2 + line 3
ß				
9	Cost of Capital		9.24%	Schedule D-1, line 4
7				
8	Carrying Costs	49	20,790	Line 4 x line 6
0				
₽	Total Deferred Costs	49	245,790	Line 4 + line 8
11				

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO

Book III – Alternative Energy Plan

DIRECT TESTIMONY

OF DONA R. SEGER-LAWSON

D MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION

- OPERATING INCOME
- RATE BASE
- ALLOCATIONS
- RATE OF RETURN
- RATES AND TARIFFS
- OTHER

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

DIRECT TESTIMONY OF

DONA R. SEGER-LAWSON

ON BEHALF OF THE DAYTON POWER & LIGHT COMPANY

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III.	ALTERNATIVE ENERGY PLAN RATE DEVELOPMENT	2
IV.	SCHEDULES AND WORKPAPERS	6
V.	CONCLUSION	9



Dona R. Seger-Lawson Book III – Alternative Energy Plan Page 1 of 9

Ι. INTRODUCTION 1 2 Q. Please state your name and business address. 3 Α. My name is Dona R. Seger-Lawson. My business address is 1065 Woodman Drive, Dayton, Ohio 45432. 4 5 Q. By whom and in what capacity are you employed? 6 Α. I am employed by The Dayton Power and Light Company ("DP&L" or "Dayton" or the "Company") as Director, Regulatory Operations. 7 Will you describe briefly your educational and business background? 8 Q. 9 A. I received a Bachelor of Science degree in Business Administration with majors in 10 Finance and Management from Wright State University in Dayton, Ohio in 1992. I 11 achieved a Master in Business Administration with a Finance Administration 12 concentration also from Wright State University in August of 1997. I have been employed by DP&L in the Regulatory Operations division since 1992. 13 14 Q. How long have you been Director of Regulatory Operations? 15 A. I assumed my present position on August 25, 2002. Prior to that time, I held various 16 positions in the Rates/Pricing Services/Regulatory Operations division, my most recent prior position being that of Manager, Regulatory Operations, beginning in February 2001. 17 18 Q. What are your responsibilities in your current position? 19 А. I have overall responsibility for all base rate development, for both retail and wholesale 20 electric rates. I am responsible for evaluating regulatory and legislative initiatives, and

21		regulatory commission orders that impact the Company's retail and wholesale rates and
22		overall regulatory operations.
23	Q.	Have you previously provided testimony before the Public Utilities Commission of
24		Ohio ("PUCO" or the "Commission")?
25	A.	Yes. I have sponsored testimony in Case No. 99-220-GA-GCR; Case No. 00-220-GA-
26		GCR; DP&L's Electric Transition Plan, Case No. 99-1687-EL-ETP; DP&L's Extension
27		of the Market Development Period Case No. 02-2779-EL-ATA; in Opposition to the
28		Complaints in Cases Nos. 03-2405-EL-CSS, and 04-85-EL-CSS; and in the Company's
29		Rate Stabilization Period Case No. 05-276-EL-AIR.
30	II.	PURPOSE OF TESTIMONY
31	Q.	What are the purposes of your testimony in this proceeding?
32	A.	One purpose of my testimony is to support the revenue recovery portion of the
33		Alternative Energy Plan. Specifically, I am supporting Schedules A-1, A-2, A-3,
34		Schedule E-5, and workpaper WPA-1 contained in Book III of this filing. Further, I
35		support Tariff Sheet No. G26, which contains the proposed Alternative Energy Rider
36		(AER) that will be assessed on all standard offer kilowatt-hour sales.
37	111.	ALTERNATIVE ENERGY PLAN RATE DEVELOPMENT
38	Q.	Can you give a brief overview of the cost recovery structure the Company is
39		seeking?
40	A.	Yes. The Company proposes to recover costs associated with this plan via an Alternative
41		Energy Rider (AER) that will be assessed on all sales provided under Standard Service

42		Offer Tariff Schedules G10 through G19. This rider is initially established as a
43		bypassable rider in that the alternative energy requirements imposed by SB 221 are
44		required to be met by both electric utilities as well as electric services companies.
45		Therefore, Competitive Retail Electric Service (CRES) Providers are also required to
46		meet the alternative energy benchmarks established in the law.
4 7	Q.	Why did you say the rider "is initially established as a bypassable rider"?
48	А.	Ohio Revised Code (ORC) Section 4928.143 (B)(2)(c) provides for a nonbypassable
49		surcharge for a generating facility that is owned or operated by the electric distribution
50		utility that was sourced through a competitive bid process. The Company anticipates that
51		in the future it may build or purchase renewable or alternative energy resources which it
52		will procure through a competitive bid process. To the extent that DP&L plans to enter
53		into such a project, it will include it in the Company's Integrated Resource Plan and may
54		seek to recover the costs of that project through a nonbypassable rider consistent with SB
55		221 as well as with the PUCO rules related to SB 221. At this time, however, the
56		Company does not have an ownership share in such projects that meet the standards set
57		forth in that section of the law.
58	Q.	When does the Company plan to request such nonbypassibility status for this rider?
59	A.	As discussed in the testimony of DP&L Witness Stephenson, the Company is evaluating
60		its options and opportunities to meet the alternative energy benchmarks contained in the
61		law, and thus will make subsequent tariff filings and plans as the Company's

62 implementation plans progress over time.

63 Q. What is the Company's jurisdictional adjustment factor for this rider and how was it calculated? 64 65 A. The baseline calculations included all retail customers, those on standard offer and those 66 served by affiliate and non-affiliated CRES Providers; therefore the target for renewables 67 was a total retail sales number. The ratio of standard offer sales to total retail sales was 68 used as the jurisdictional adjustment factor to ensure that the renewable compliance costs 69 assigned to standard offer customers were representative of only the costs associated with 70 meeting this requirement for standard offer customers. 71 **Q**. Where can the estimated AER rate for 2009 be found in this filing? 72 Α. The estimated AER rate for 2009 is contained on Tariff Sheet No. G26 as well as line 26 73 of Schedule A-1. 74 Q. How was the AER rate developed? 75 Α. The AER rate was developed by taking the estimated cost of RECs for the 2009 76 requirements, plus the deferred costs, plus the registration and subscription costs 77 associated with Generation Attribute Tracking system (GATS) and Midwestern 78 Renewable Energy Tracking System (M-RETS), plus an estimate of internal labor costs 79 associated with administering the alternative energy plan. 80 Q. What types of costs were deferred? 81 A. DP&L hired Battelle to assist in evaluating the results of the RFP. Those costs were 82 included in the deferred costs as well as an estimate for internal labor.

Dona R. Seger-Lawson Book III – Alternative Energy Plan Page 5 of 9

83	Q.	Many of your costs are estimates. How and when will they be trued up?
84	А.	The Company plans to true up all costs that are included in the AER each year. To the
85		extent updated information is available, this filing will be updated accordingly.
86	Q.	Based on its current plans, does the Company expect to be limited by the 3% cost
87		cap established in ORC 4928.64 (C)(3)?
88	А.	No. Based on the Company's current plans to purchase RECs to meet the renewable and
89		solar benchmarks for 2009 and 2010, we do not expect to reach the 3% cost cap in the
90		first couple of years of DP&L's alternative energy plans. Based on the Commission's
91		proposed rules established in OAC 4901:1-40-07, DP&L calculates the 3% cost cap to
92		equate to approximately \$21 M per year. As depicted on Schedule A-1, the Company
93		expects its renewable compliance costs for 2009 to be approximately \$1 M. Therefore
94		the compliance costs are not approaching the 3% cap at this time.
95	Q.	If the Company purchases renewable energy via a Power Purchase Agreement,
96		what costs will be included in the AER?
97	A.	DP&L would propose that the total cost of the renewable purchase be included in the
98		AER, which would include any capacity, energy, and ancillary services costs charged to
99		DP&L by the generator, any ancillary and transmission costs charged by other utilities or
100		a transmission operator other than PJM, and any congestion charges. For a stand-alone
101		REC purchase, the costs including in the AER would include the cost of the REC itself
102		and any brokerage fees and other similar costs paid to third parties in connection with the
103		purchase of the RECs. DP&L does not propose to include PJM Network Transmission

104 Service (NTS) charges in the AER because DP&L pays PJM for this service based on load and those costs would not vary as the result of a purchase of renewables or RECs. 105 Q. Please provide examples. 106 107 A. For example, if the Company purchases the full output (capacity, energy, ancillary 108 services if any, and associated RECs) from a wind facility sited in a western state for \$25 per MWH and incurs an additional \$10 per MWH to have that power transmitted into 109 PJM, the \$35 per MWH cost would be included in the AER. Transmission charges from 110 111 PJM into the Dayton zone would not be included in the AER. If there were additional congestion charges imposed by PJM as a result of the delivery of renewables to DP&L. 112 113 those costs would be included. If in the same example, however, only the REC was 114 purchased for \$8 per MWH plus a brokerage fee and there was no associated energy or transmission costs incurred, then only the \$8 cost plus brokerage fee would be included 115 116 in the development of the AER. SCHEDULES AND WORKPAPERS IV. 117

118 Q. What is the purpose of Schedule A-1?

A. Schedule A-1 calculates the estimated 2009 AER rate. Beginning with the statutory
benchmarks contained in ORC 4928.64(B)(2) applied to the Company's baseline sales,
the Company is required to secure a total of 37,444 MWH of renewable energy or
renewable energy credits (RECs), of those 599 MWH must be solar energy or solar
RECs. In addition, of the total renewable energy requirements, one-half must be met
through facilities located in Ohio. Therefore, 18,722 MWH must be renewable energy or

125		RECs from Ohio, with the remaining 18,123 MWH from non-Ohio resources. Based on
126		estimated prices of \$4 / MWH for non-solar outside Ohio REC costs, \$20 / MWH for
127		Ohio RECs, and \$545 for solar RECs, DP&L expects the total REC cost in 2009 to be
128		approximately \$800,000. Deferred costs, GATS and M-RETS registration and
129		subscription costs, as well as an estimate for internal labor were added to the REC costs.
1 30		The total amount of renewable compliance costs were then jurisdictionalized to ensure
131		only the costs associated with meeting this target for standard offer customers are being
132		charged to standard offer customers. The resulting amount was then divided by
133		forecasted retail standard offer sales for April through December 2009 to derive an AER
134		rate of \$0.0001146 per kWh.
D ₁₃₅	Q.	Why did the Company propose to begin recovery of this amount in April instead of
136		January?
137	Α.	The April 1 effective date was selected to provide for sufficient time for the Commission
138		and intervenors to review and assess DP&L's proposals. The proposal assumes that the
139		regulatory process will be complete and an order will be issued during first quarter of
140		2009. Therefore, it appears that the soonest that the rate would be in place would be
141		April 1, 2009.
142	Q.	What is the purpose of Schedule A-2?
143	A.	Schedule A-2 calculates the estimated AER rate for 2010. Again, starting with the
144		statutory targets contained in ORC 4928.64(B)(2) applied to the baseline sales, the

146		those 1,483 MWH must be solar energy or solar RECs. In addition, one-half of the total
147		renewable energy requirements must come from Ohio resources. Therefore, 37,065
148		MWH must be renewable energy or RECs from Ohio, with the remaining 35,582 MWH
149		from non-Ohio resources. Based on current estimates of the price of a REC in the
150		market, DP&L would have an estimated REC cost of \$1.7 M in 2010. GATS and M-
151		RETS subscription costs, plus an estimate for internal labor were added to the REC costs.
152		This amount was then jurisdictionalized and then divided by forecasted retail standard
153		offer sales for 2010 to derive an AER rate of \$0.0001323 per kWh.
154	Q.	Will this rate change prior to being implemented in 2010?
155	A.	Yes. Because DP&L has not yet secured RECs and solar RECs to meet the 2010
156		benchmark requirements, it does not yet know what its costs will be. Further as
157		discussed in Chapter 4 of the Alternative Energy Plan, the Company proposes to true up
158		the AER rate at least annually. In other words, if the amount collected via the AER tariff
1 59		exceeds the costs that Company incurred in 2009 to meet the renewable benchmark, then
1 60		the Company proposes to provide a credit to customers via the 2010 AER tariff. In the
161		alternative, if the cost of complying with the renewable benchmark exceeds the amount
162		recovered via the tariff, then the 2010 rate would contain an adjustment factor in addition
1 63		to the expected 2010 costs of complying with the benchmark. Because of the timing of
164		this filing, DP&L does not yet know what its 2009 nor 2010 compliance costs will be;
165		thus DP&L expects that both rates will be adjusted prior to implementation as new
166		information is received. In the annual proceeding, over- and under-collections will be
167		trued-up including a carrying cost component equal to DP&L's authorized rate of return.

Dona R. Seger-Lawson Book III – Alternative Energy Plan Page 9 of 9

- 168 **Q**. What is the purpose of Schedule A-3? 169 This schedule shows how the baseline of sales was calculated based on the same baseline А. 170 that was used in developing the energy efficiency benchmarks contained in SB 221. 171 Beginning with information from Exhibit MWB-1 contained in Book II - Customer Conservation and Energy Management Programs, a baseline of MWH sales was 172 173 developed. From that baseline the amounts of renewable and solar MWHs were 174 determined. For additional information on the calculation of the baseline, see DP&L 175 Company Witness Bubp Testimony in Book II of this case. 176 What is contained on Schedule E-5? **Q**. 177 This schedule shows the estimated typical bill impact of this new AER rider. A Α. 178 residential customer that uses 750 kWh per month will pay an additional \$0.09 related to 179 the Company's AER in 2009. 180 V. CONCLUSION 181 Does this conclude your testimony? 0.
 - 182 A. Yes, at this time.
 - 183 199971.1

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

THE DAYTON POWER AND LIGHT COMPANY CASE NO. 08-1094-EL-SSO

Book III – Alternative Energy Plan

DIRECT TESTIMONY

OF GARY G. STEPHENSON

MANAGEMENT POLICIES, PRACTICES, AND ORGANIZATION

- **OPERATING INCOME**
- □ RATE BASE
- ALLOCATIONS
- RATE OF RETURN
- **RATES AND TARIFFS**
- D OTHER

BEFORE THE

PUBLIC UTILITIES COMMISSION OF OHIO

DIRECT TESTIMONY OF

GARY G. STEPHENSON

ON BEHALF OF THE DAYTON POWER & LIGHT COMPANY

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Gary G. Stephenson Book III – Alternative Energy Plan Page 1 of 15

1	Ι.	INTRODUCTION
2	Q.	Please state your name and business address.
3	А.	My name is Gary G. Stephenson. My business address is 1065 Woodman Drive, Dayton,
4		Ohio 45432.
5	Q.	By whom and in what capacity are you employed?
6	А.	I am employed by DPL, Inc. (the main subsidiary of which is The Dayton Power and
7		Light Company ("DP&L" or the "Company")) as Senior Vice President, Generation and
8		Marketing.
9	Q.	Will you describe briefly your educational and business background?
10	A.	I have a Bachelor of Science degree in Electrical Engineering from Lafayette College, a
11		Master of Science degree in Electrical Engineering from Polytechnic University, and an
12		MBA from the Amos Tuck School of Business Administration at Dartmouth College.
13		Before joining DPL, I was Vice President, Commercial Operations for InterGen,
14		responsible for its energy marketing and trading activities. Prior to that, I was Vice
15		President, Portfolio Management for PG&E National Energy Group with responsibility
16		for its energy portfolios. I have also held positions with General Electric and Northeast
17		Utilities.
18	Q.	How long have you been in your present position?
19	А.	I joined DPL in October 2005 as Vice President, Commercial Operations, and was
20		promoted to my present position in July 2007.

Gary G. Stephenson Book III – Alternative Energy Plan Page 2 of 15

21

Q. What are your responsibilities in your current position?

- 22 A. I am responsible for the operation of the generation facilities operated by DP&L and DPL 23 Energy, LLC ("DPLE") and I represent DP&L with respect to the interests in generation 24 facilities that DP&L owns that are operated by other utilities. Including its interests in 25 facilities operated by others, DP&L owns approximately 3260 MW of capacity and 26 DPLE owns an additional 545 MW of capacity. DP&L and DPLE operate generation 27 facilities with an aggregate capacity of approximately 4288 MW, of which 1730 MW is 28 owned by other utilities. In addition, I am responsible for wholesale operations, which 29 includes purchase and sales activities for coal, gas, fuel oil, emission allowances and 30 power. I also am responsible for non-utility retail businesses in the areas of competitive 31 retail electric services provided by DPL Energy Resources ("DPLER") and street lighting 32 services provided by Miami Valley Lighting.
 - 33 Q. What is the purpose of your testimony?
 - A. The purpose of my testimony is to support the Company's Alternative Energy Plan, and
 demonstrate how DP&L intends to meet the alternative energy benchmarks contained in
 SB 221.
 - 37

II.

ALTERNATIVE ENERGY PLAN

- 38 Q. Has the Company evaluated the alternative energy targets contained in SB 221?
- 39 A. Yes. The initial steps taken were to determine when and how large each individual
- 40 requirement within SB 221 would be for the Company and the timing of each
- 41 requirement. This process, while largely complete, will be adjusted to conform with the

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42 Commission's final rules implementing SB 221. A key element of determining the size 43 of each requirement will be determined once there is more clarity in the final rules as to 44 how a baseline is to be computed and used to determine compliance. DP&L has 45 submitted comments to the Commission with regard to Staff's proposed regulations on computing the baseline. Additionally, DP&L's plans are flexible at this point and may 46 47 need to be adjusted depending on how the Commission addresses proposed modifications 48 to Staff's proposed regulations with respect to other key issues including the definition of 49 "deliverable into the State" and whether there is a requirement that 50% of the solar 50 requirement be met from facilities located in Ohio.

51 **Q**. With respect to the renewable requirements, is there an overall corporate 52 philosophy or approach that is being taken for meeting the requirements? 53 Α. Yes. As a general rule, DP&L plans to meet the requirement on a lowest reasonable cost 54 basis taking into consideration price and reliability of supply. It is seeking to meet the 55 first few years of requirements through a combination of Power Purchase Agreements 56 ("PPAs") and/or Renewable Energy Credits ("RECs") acquired from third parties. 57 Consistent with this approach and with an eye toward the longer-term, the Company has 58 issued a Request for Proposal ("RFP") that seeks bids for RECs, PPAs and renewable 59 assets that it could build or buy. Over the longer term, DP&L intends to meet the 60 requirements through a combination of owning renewable assets, PPAs and the purchase 61 of RECs.

62 Q. What are the DPL renewable and solar obligations for the next two years?

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A. SB 221 specifies an annual renewable target and then identifies a specific subset of that
target that must be provided via solar resources. The renewable and solar requirements
for the DPL retail load is depicted below:

	<u>2009</u>	<u>2010</u>
Renewable Energy Target	37,444	74,129
Ohio Sited Portion of R.E. Target	18,722	37,065
Solar Energy Target	599	1,483

67 The Company interprets the legislation to require 50% of the renewable target to be 68 required to come from Ohio resources, but does not believe that SB 221 requires that 69 50% of the solar target be met from resources located in Ohio.

70 Q. Are the above targets based on DP&L's Standard Service Offer load?

A. Yes, in part. The Company as a whole is preparing to meet the requirements for both
 DP&L's standard service offer load as well as the load currently served by DPLER. The
 targets above are based on total retail sales forecasted to be made by both entities.

74 Q. What are the Company's plans to meet the advanced energy targets contained in

75 SB 221?

66

A. Pursuant to the law, advanced energy resources are defined to include improved

77 efficiencies at power plants if achieved without additional carbon dioxide emissions,

- 78 distributed generation systems providing electricity and thermal output, clean coal
- 79 technologies, advanced nuclear energy, fuel cells, advanced solid waste or construction
- 80 and demolition debris conversion technology that results in measurable greenhouse gas
- 81 emissions reductions, and demand-side management and energy efficiency

02		improvements. As detailed in other portions of this filing, DP&L has a very extensive
83		plan to implement Customer Conservation and Energy Management Programs
84		("CCEM") that are centered around energy efficiency and demand response programs.
85		Some or a significant amount of the advanced energy target may be met through
86		implementation of its CCEM. In the event that DP&L may over-comply with the 2025
87		renewable target, that would also help meet the overall 2025 advanced energy target. In
88		addition, DP&L will look for opportunities to invest in advanced energy technology,
89		including opportunities to participate in joint ventures or other forms of co-ownership
90		arrangements for advanced energy resources.
01	•	
91	Ų.	Does DP&L have plans to meet specific annual advanced energy targets?
92		DD&L intends to meet the 2025 advanced energy target, but no plane have been formally
	А.	Dr&L menus to meet the 2025 advanced energy target, but no plans have been tormany
93	А.	developed as yet. Unlike the renewable energy targets, which include annual targets
93 94	A.	developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the
93 93 94 95	A.	developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component.
93 94 95	A.	developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component.
93 94 95 96	А. Q.	 brack intends to infect the 2025 advanced energy target, but no plans have been formally developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component. What types of RECs is the Company planning to purchase?
93 94 95 96 97	Q. А.	 beginning in 2009, there are no specified interim targets required to be met for the advanced energy component. What types of RECs is the Company planning to purchase? RECs may be procured in connection with a PPA or purchased on a stand-alone basis.
93 94 95 96 97 98	Q. А.	 DPACE intends to meet the 2023 advanced energy target, but no plans have been formally developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component. What types of RECs is the Company planning to purchase? RECs may be procured in connection with a PPA or purchased on a stand-alone basis. The Company plans to purchase three types of RECs. 1) RECs that are sourced or
93 94 95 96 97 98 99	Q. А.	 DP&L intentis to infect the 2023 advanced energy target, but no plans have been formally developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component. What types of RECs is the Company planning to purchase? RECs may be procured in connection with a PPA or purchased on a stand-alone basis. The Company plans to purchase three types of RECs. 1) RECs that are sourced or generated by facilities from inside the State of Ohio; 2) RECs from facilities that are
93 94 95 96 97 98 99 100	Q. А.	 b) F&L intends to meet the 2023 advanced energy target, but no plans have been formally developed as yet. Unlike the renewable energy targets, which include annual targets beginning in 2009, there are no specified interim targets required to be met for the advanced energy component. What types of RECs is the Company planning to purchase? RECs may be procured in connection with a PPA or purchased on a stand-alone basis. The Company plans to purchase three types of RECs. 1) RECs that are sourced or generated by facilities from inside the State of Ohio; 2) RECs from facilities that are outside the State of Ohio; and 3) Solar RECs. DP&L's interpretation of SB 221 is that

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102	Q.	Is there any need for additional Commission guidance with respect to the purchase
103		of RECs?

A. Yes, there is. There are active markets today in which RECs are bought and sold, but
there is a significant amount of uncertainty as to which RECs will qualify toward
compliance with Ohio's renewable targets. In particular, more clarity is needed with
respect to the eligibility of RECs that are originally created from facilities located outside
Ohio.

109 Q. Please explain why clarity is important in this area.

110 А. There are wide variations in price for RECs and we do not want to overpay for RECs that 111 may be from facilities located in Ohio or Pennsylvania, if there are much less expensive 112 RECs available from facilities located in North Dakota, Wyoming or even California. At 113 the same time, because the penalties for non-compliance with the renewable requirements 114 can be severe, DPL would not want to purchase these less expensive RECs only to find 115 out later that they will not qualify toward the targets. Lastly, because the market for 116 RECs is dynamic, there is little realistic ability to ask a seller to hold an offer open 117 pending a ruling on eligibility by the PUCO. So, it is critically important that before we 118 enter into the market for RECs, we know that we are acquiring RECs that will count 119 toward the targets.

120 Q. What does DP&L propose?

A. We would urge the Commission, in its final rules implementing SB 221, to make clear
that if a REC is from a facility that meets the definition of a renewable energy resource

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and is interconnected with any utility that is itself interconnected with the interstate transmission grid, then the REC will count toward the renewable targets.

125 Q. How does DP&L square its proposal with statutory requirements?

126 A. I am not a lawyer and I am not giving a legal opinion. I can provide you with my views 127 based on my experience in reading statutes, regulations, and other legal documents in 128 connection with my work in the electric industry over the last 20 years. As I read section 129 4928.65 of SB 221, RECs can be acquired and used any time during a five-year period 130 after purchase towards compliance with the renewable requirements. The acquisition can 131 be "from any entity, including but not limited to" and a couple of examples are provided 132 involving mercantile customer projects or projects on rivers within or bordering Ohio or 133 within or bordering a bordering State. There is no requirement that there be energy 134 purchased along with the REC and, consistent with that, there is no requirement that the 135 REC be "deliverable" to Ohio. The examples given are of facilities located in or close to 136 Ohio, but those examples are explicitly not limitations – they are just examples.

The statute, interpreted this way, also meshes with what RECs are and how they are
bought and sold. RECs are certificates documenting a right. RECs are typically bought
and sold as separate products independent of the electric energy produced by a facility.
They are "deliverable" by mail, facsimile, and internet, not via electric transmission lines.

141 Q. Does the Company have any other specific proposals in this area that would
142 enhance clarity?

.

143	Α.	Yes. DP&L would urge the Commission to make explicit rulings on qualification with
144		respect to certain REC market products that are already well-defined. Several nearby
145		states have renewable energy portfolio requirements and markets have developed such
146		that one can call a broker to obtain RECs that fall within certain categories defined by
147		statute within those states. For administrative simplicity, the PUCO should take
148		advantage of the work already done in those states and make a finding that the following
149		types of RECs will qualify in Ohio provided that the in-service date of the source is
150		January 1, 1998 or later: NJ Class I REC, PA Tier 1 REC, MD Tier I REC, DC Tier 1
151		REC, and DE "New" REC. DP&L will also consider and evaluate purchasing RECs that
152		are not listed on the broker sheets but that meet the SB 221 requirements.
153		In addition, and with respect to RECs that do not fall into any of the above categories,
153 154		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining
153 154 155		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the
153 154 155 156		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two
153 154 155 156 157		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two before they are sold elsewhere, so there may be no opportunities to obtain a formal
153 154 155 156 157 158		 In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two before they are sold elsewhere, so there may be no opportunities to obtain a formal Commission ruling that a particular REC source will qualify. So, we would request that
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153 154 155 156 157 158 159 160		 In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two before they are sold elsewhere, so there may be no opportunities to obtain a formal Commission ruling that a particular REC source will qualify. So, we would request that the PUCO establish a process under which a utility can inform the PUCO Staff on a confidential basis of potential transactions including the type of facility generating the
153 154 155 156 157 158 159 160 161		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two before they are sold elsewhere, so there may be no opportunities to obtain a formal Commission ruling that a particular REC source will qualify. So, we would request that the PUCO establish a process under which a utility can inform the PUCO Staff on a confidential basis of potential transactions including the type of facility generating the REC, its in-service date, and location and obtain a quick confirmatory letter that based on
153 154 155 156 157 158 159 160 161 162		In addition, and with respect to RECs that do not fall into any of the above categories, DP&L requests that the PUCO direct its Staff to work with utilities in obtaining assurances that a particular REC that is available for sale will qualify. Due to the dynamic nature of the market, such opportunities may be open for only a day or two before they are sold elsewhere, so there may be no opportunities to obtain a formal Commission ruling that a particular REC source will qualify. So, we would request that the PUCO establish a process under which a utility can inform the PUCO Staff on a confidential basis of potential transactions including the type of facility generating the REC, its in-service date, and location and obtain a quick confirmatory letter that based on the information received by Staff, it believes that the REC will qualify.

163

Q. How will the Company procure RECs?

164	А.	RECs will be obtained in one of two ways. First, and as discussed in greater detail
165		below, on July 25, 2008, DP&L issued an RFP seeking proposals to meet DP&L's
166		alternative energy targets, including the purchase of RECs. Second, there is a secondary
167		market where RECs are freely bought and sold at market prices. RECs will be purchased
1 68		on the most economical basis while adhering to the requirements outlined in section
169		4928.64(B)(3) of the Ohio Revised Code. Assuming greater clarity is provided regarding
170		qualification toward the targets, DP&L does not intend to limit the potential pool of REC
1 71		sellers and will purchase RECs from resources consistent with a lowest reasonable cost
172		approach, taking into account price and reliability of supply.
173	Q.	How will the Company track the RECs it purchases and how will it be sure that the
174		REC is properly certified?
174 175	А.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and
174 175 176	А.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it
174 175 176 177	A.	REC is properly certified?DP&L plans to register with Generation Attribute Tracking system ("GATS") andMidwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs itpurchases (whether as a stand alone REC or as part of a PPA or project ownership) are
174 175 176 177 178	А.	REC is properly certified?DP&L plans to register with Generation Attribute Tracking system ("GATS") andMidwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs itpurchases (whether as a stand alone REC or as part of a PPA or project ownership) areproperly tracked and, sold only to DP&L, and not used for other purposes.
 174 175 176 177 178 179 	A. 0.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it purchases (whether as a stand alone REC or as part of a PPA or project ownership) are properly tracked and, sold only to DP&L, and not used for other purposes. How will the Company comply with the requirement contained in ORC 4928.64
 174 175 176 177 178 179 180 	А. Q.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it purchases (whether as a stand alone REC or as part of a PPA or project ownership) are properly tracked and, sold only to DP&L, and not used for other purposes. How will the Company comply with the requirement contained in ORC 4928.64 (B)(3) that states in part "at least one-half of the renewable energy resources.
 174 175 176 177 178 179 180 181 	А. Q.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it purchases (whether as a stand alone REC or as part of a PPA or project ownership) are properly tracked and, sold only to DP&L, and not used for other purposes. How will the Company comply with the requirement contained in ORC 4928.64 (B)(3) that states in part "at least one-half of the renewable energy resources
 174 175 176 177 178 179 180 181 182 	А. Q.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it purchases (whether as a stand alone REC or as part of a PPA or project ownership) are properly tracked and, sold only to DP&L, and not used for other purposes. How will the Company comply with the requirement contained in ORC 4928.64 (B)(3) that states in part "at least one-half of the renewable energy resources shall be met through facilities located in this state"?
 174 175 176 177 178 179 180 181 182 	A. Q.	REC is properly certified? DP&L plans to register with Generation Attribute Tracking system ("GATS") and Midwestern Renewable Energy Tracking System ("M-RETS") to ensure the RECs it purchases (whether as a stand alone REC or as part of a PPA or project ownership) are properly tracked and, sold only to DP&L, and not used for other purposes. How will the Company comply with the requirement contained in ORC 4928.64 (B)(3) that states in part "at least one-half of the renewable energy resources shall be met through facilities located in this state"?

184 due to limitations on the amount of renewable energy available in Ohio and the infancy
185 of Ohio REC markets.

186 Q. What is your definition of "deliverable into this state"?

- 187 A. As discussed above, we do not believe that this definition should be part of the
 188 determination of whether or not a REC qualifies toward the targets; a REC is a certificate
 189 that is always going to be deliverable into this state via U.S. Mail.
- 190 With respect to electric energy that does flow over transmission lines, DP&L also urges 191 the Commission to adopt a definition for "deliverable into this state" that meets the 192 requirements of SB 221 in a way that will maximize the number of potential sellers of 193 renewable energy and keep costs to the lowest reasonable level. SB 221 provides only 194 that a showing be made that the resources "can be shown to be deliverable into this 195 state." In our view, this language does not compel a utility to sign potentially expensive 196 transmission agreements to create a contractual right to use a transmission path that exists 197 between the generator and Ohio. The word "can" in the statute should be read literally to 198 mean that the power can be delivered into Ohio even if it is not actually delivered to 199 Ohio. This approach will reduce costs and also matches up with how electricity "really" 200 flows as opposed to a contractual fiction of how it flows.

201 Consistent with this interpretation, when DP&L procures electricity bundled with a REC,
 202 it would do so from facilities that are interconnected to electric distribution and
 203 transmission systems such that the electricity from such a facility could be transmitted to
 204 this state, but would not necessarily enter into transmission agreements. In order to
205		provide more clarity in this area, DP&L has filed comments with respect to Staff's
206		proposed regulations that proposed that any electricity from a facility sited in Ohio, a
207		contiguous state, or is interconnected with an electric transmission company that is a
208		member of the PJM Interconnection, LLC, or the Mid-West Independent Transmission
209		System, Inc. should be deemed to be "Deliverable into this state." For facilities sited
210		elsewhere and applicable only when the REC is bundled with electric energy, the
211		deliverability test should require only that a transmission path exists such that the power
212		from such a facility could be delivered into this state, but it should not be required that
213		transmission agreements actually be executed.
2 14	Q.	What are the Company's mid-term (2011-2013) plans?
215	А.	The foundation for compliance during the mid-term (2011-2013) is expected to include a
216		combination of PPAs that include RECs and ownership which may include new
217		construction, some of which may be owned by DP&L. Some projects are expected to be
218		identified through the RFP or through subsequent RFPs that may be issued. Other
219		projects are expected to be identified by DP&L as potential opportunities, and others may
220		be brought to DP&L by project developers. Again, RECs may be purchased to fill in any
221		gap between the amount of renewable energy obtained in these ways and the Company's
222		requirement.
 .	0	What are the Company's long term plans?

A. The experience gained in the near and mid-term will be employed to meet the longer term renewable requirements. At this time, DP&L does not believe that it is appropriate

.

226		or possible to develop the details for a long-term plan. The RFP that has been issued
227		permits prospective sellers to make proposals to sell renewable energy for periods
228		ranging from 3 years to 20 years. It is uncertain at this time, however, whether there will
229		be a significant number of offers presented and for what durations. If, for example, there
230		are significant amounts of renewable projects offered for 20-year terms, that would
231		greatly influence the shape and scope of DP&L's future plans to meet its longer-term
232		requirements. This approach is also consistent with the inherent uncertainty that exists
233		with respect to the renewable energy markets that are still in the early stages of
234		development. The Ohio REC requirements are aggressive and potentially subject to
235		limitations based on costs and future availability of supply. These uncertainties make it
236		impractical to attempt to now develop the details for compliance over the longer term.
237	Q.	Does DP&L believe that its compliance plans will result in the meeting the targets
238		set in SB 221 without exceeding the 3% cost increase level set forth in SB 221.

A. If the 3% level is applied as Staff has described it in its proposed regulations, DP&L does
not envision costs exceeding that level in 2009 and 2010. Beyond that time, the costs

241 become more unpredictable.

242

111.

REQUEST FOR PROPOSALS (RFP)

243 Q. Please describe the RFP.

A. The RFP sought proposals across a broad array of alternative approaches, with the single
common element that the proposal had to involve a resource that qualified as renewable



246	under SB 221. Beyond that constraint, however, the RFP was developed to maximize the
247	potential number of bidders.
248	The RFP specified that:
249	"Bid proposals may be in the form of:
250	a. Purchase Power Agreement (energy plus associated RECs and may, but does
251	not necessarily, include capacity and other ancillary services)
252	b. Purchase Power Agreement with a buyout option
253	c. Turnkey Construction Project (including the transfer of all rights to RECs)
254	d. Sale and Purchase Agreement for RECs on a stand-alone basis (no energy,
255	capacity, or other products)
256	e. Any combination of the above.
257	The RFP requested proposals to purchase renewable energy or RECs for periods of time
258	ranging from 3 years to 20 years. It requested proposals for turnkey operations under
259	which DP&L would become the owner. While bidders were encouraged to present bids
260	in the form of a MWh proposal that corresponds to the targets in SB 221, bidders were
261	permitted to offer proposals on a MW basis. A preference was noted in the RFP for
262	projects sited in Ohio, but projects outside of Ohio will also be considered. A preference
263	was also expressed for projects that could be placed in service before the end of 2010, but
264	again, that was expressed as a preference and not as a requirement that would exclude
265	alternatives with longer lead times.

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Q. How was the RFP distributed?

267 A. The information was distributed via a press release with a link to the RFP. The press 268 release was distributed to nationally known media outlet, Business Wire, and in 269 accordance with DPL procedures for sending all news releases, including financial news 270 releases subject to financial disclosure requirements. The deadline for responses to the 271 RFP was September 12, 2008. 272 Q. What is the current status of the RFP and your internal process for reviewing any 273 submittals and entering into agreements? 274 А. Because we are involved in negotiations with some entities currently, there are 275 confidentiality requirements that limit my ability to provide some specific details. I can 276 indicate that the RFP generated a significant amount of interest, resulting in a number of 277 Notice of Intent to Bids ("NOIBs"). However, a good portion of these NOIBs were 278 RECs or energy and RECs only proposals. DP&L will be supplementing this filing with 279 additional information, including identifying any contracts that may be executed. 280 Q. Aside from the RFP, does DP&L have any plans to construct any renewable energy 281 projects in the near term? 282 **A**: DP&L has been working closely with its co-owners Duke Energy Ohio and Columbus 283 Southern at the Stuart generating station to determine the feasibility of installing a 3.8 284 MW hydropower facility at the site. The new plant would use water that currently is used 285 to cool the plant and is then discharged through a pipe to a 30-foot drop from which the 286 water flows downstream to the Ohio River. That 30-foot drop or "head" is enough to 287 make the installation of small hydropower turbines economically feasible. DP&L has

288 looked at its other plants for similar opportunities but they do not have sufficient head or 289 the water volume that would justify such installations. To the extent that DP&L pursues 290 this project, it will include it in the Company's next Integrated Resource Plan ("IRP") 291 and will competitively bid out the construction of the project. DP&L is also working 292 closely with individual suppliers and project developers which are exploring projects 293 using solar energy, biomass energy and wind energy. These projects are in the initial 294 planning stage and may or may not come to fruition. Other specific potential projects include construction of a small-scale tire fractionation plant that would supplement coal 295 296 (and in effect reduce the amount of coal consumed) for use in an existing powerplant; a 297 wood pelletization project that would create a fuel for use in an existing powerplant; and 298 partnering with other entities on larger-scale hydropower.

299 **IV.**

CONCLUSION

- 300 Q. Does this conclude your testimony?
- 301 A. Yes.

302 198922.1